THE INTERNATIONAL MAGAZINE OF METHODS FOR ENGINEERING/OPERATING PEOPLE

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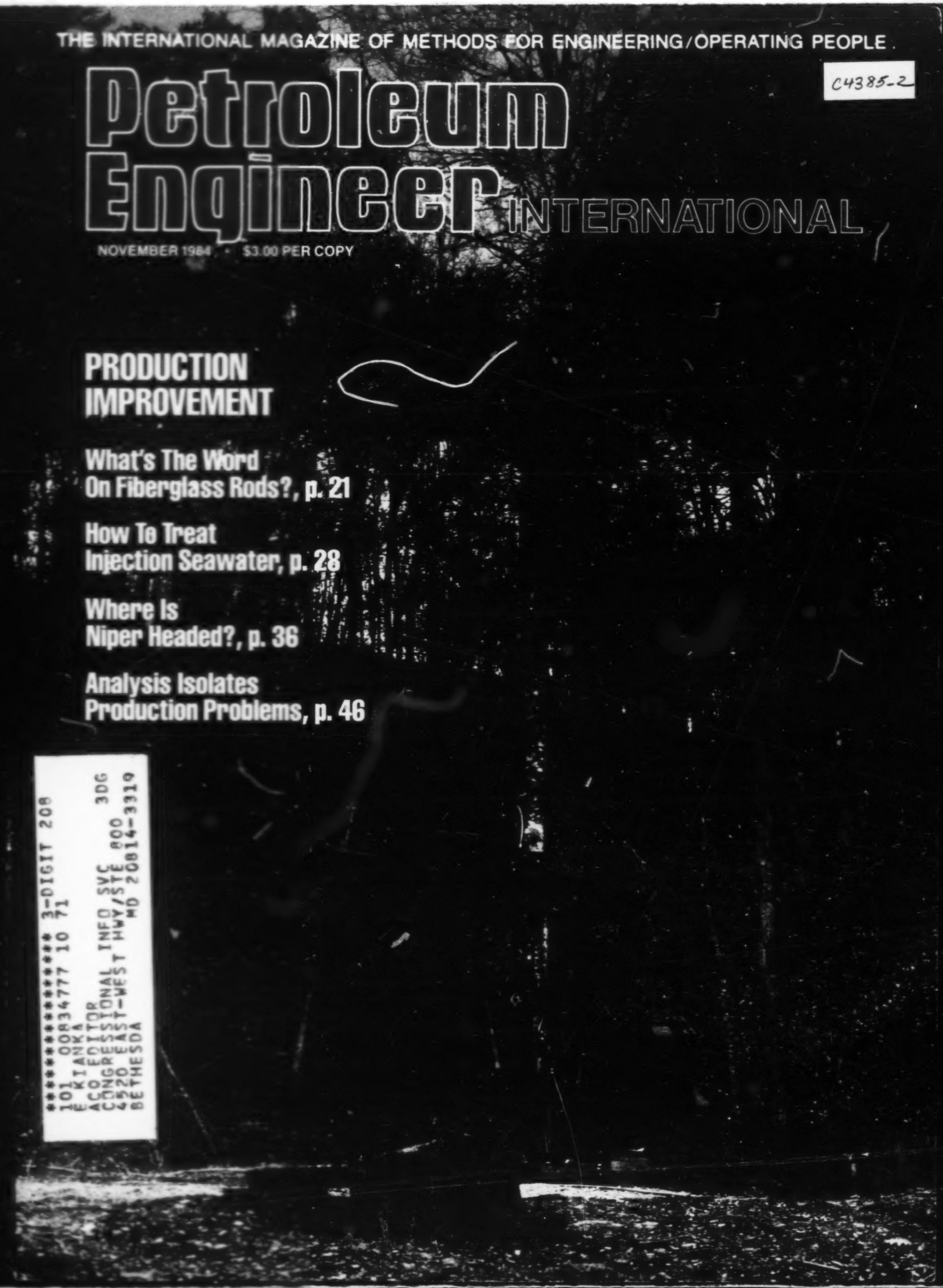
Petroleum Engineer INTERNATIONAL

NOVEMBER 1984 • $3.00 PER COPY



PRODUCTION IMPROVEMENT

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BETHESDA MD 20814-3319

Petroleum Engineer® INTERNATIONAL

P.O. Box 1589 • Dallas, Texas 75221-1589
(214) 691-3911 • **TWX** 910-861-9306

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Autumn Ushers In Increase In U.S. Drilling

The U.S. count of active rotary rigs picked up during the period of this report with four straight weeks of increased activity. Canada, on the other hand, suffered a sharp drop from the 260-level in mid-September all the way down to 184 at the beginning of October. Dominion drillers seem to have recovered quickly, however, because they added 55 active rigs by October 8.

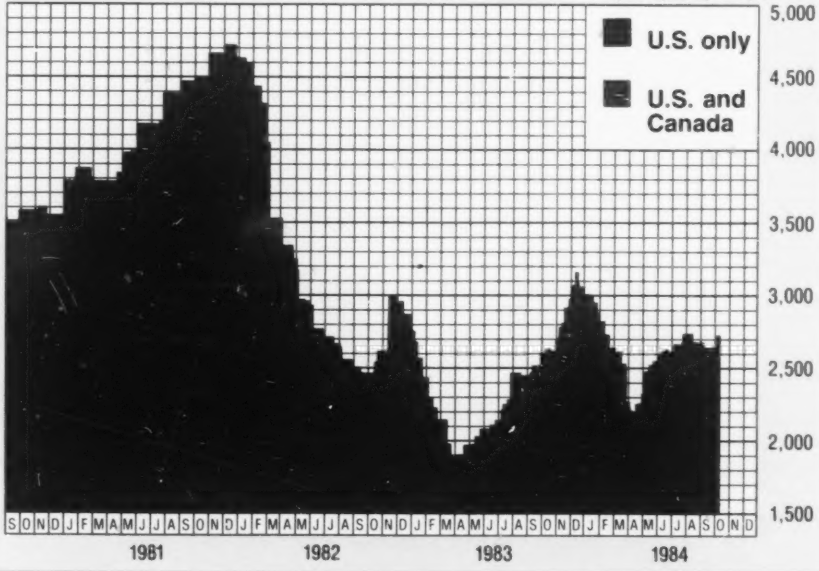
As is becoming usual, state-by-state activity remained fairly constant from mid-September to early October. Texas leads the way with more than 800 active rigs. Second most active state, according to Hughes Tool Co., preparers of the weekly rig counts, is Louisiana, with slightly more than 300. Oklahoma is a close third with rig counts in the 280-range, and Kansas has a firm grip on fourth place with approximately 140 active rigs.

Fighting it out for the last remaining spot in the five are Wyoming and California, with Wyoming currently ahead by fewer than ten rigs.

Rotary rigs actually making hole in United States & Canada

As Reported To International Association Of Drilling Contractors By Hughes Tool Co.

	Sept. 17, 1984	Sept. 24, 1984	Oct. 1, 1984	Oct. 8, 1984
Alabama				
Land	13	13	8	14
Inland Waters	3	3	4	4
Offshore	1	1	1	1
Total	17	17	13	19
Alaska				
Land	9	8	8	7
Offshore	5	5	6	8
Total	14	13	14	15
Arkansas	31	27	26	31
California				
Land	92	95	91	90
Offshore	17	19	17	21
Total	109	114	108	111
Colorado	57	49	58	58
Florida	2	2	3	3
Georgia	0	0	1	1
Idaho	0	1	1	1
Illinois	51	51	54	58
Indiana	7	7	5	8
Kansas	145	148	145	139
Kentucky	10	11	9	7
North Louisiana	29	30	26	25
South Louisiana				
Inland Waters	43	46	49	55
Land	92	87	89	93
Offshore	136	132	138	143
Total	300	295	302	316
Michigan	37	35	35	39
Mississippi	32	31	37	27
Montana	46	42	38	31
Nebraska	5	7	8	7
Nevada	6	6	5	5
New Jersey				
Offshore	1	1	1	1
New Mexico	78	83	84	94
New York	7	8	10	8
North Dakota	45	54	41	39
Ohio	54	56	60	67
Oklahoma	294	286	280	284
Oregon	0	0	0	1
Pennsylvania	44	45	43	46
South Dakota	3	2	2	2
Tennessee	1	1	1	1
Texas				
Offshore	56	52	55	56
Inland Waters	5	3	5	8
Dist. 1-S. Central Tex.	16	16	16	13
Dist. 2-Middle Tex. Coast	35	37	39	39
Dist. 3-Upper Tex. Coast	97	101	115	112
Dist. 4-Lower Tex. Coast	81	78	81	89
Dist. 5-Northeast Tex.	32	35	22	40
Dist. 6-Far Northeast Tex.	76	68	76	60
Dist. 7B-N. Central Tex.	46	39	48	49
Dist. 7C-W. Central Tex.	51	53	55	56
Dist. 8-Far West Tex.	144	160	161	151
Dist. 8A-West Tex.	76	71	69	70
Dist. 9-North Tex.	72	76	72	71
Dist. 10-Tex. Panhandle	41	44	48	45
Total	828	833	862	[illegible]
Utah	46	48	47	[illegible]
Vermont	0	0	1	[illegible]
Virginia	4	3	3	[illegible]
Washington State	1	1	1	[illegible]
West Virginia	43	42	41	48
Wyoming	119	121	113	118
Total U.S.	2,438	2,441	2,452	2,487
Canada	211	174	171	225
Canada-Offshore	17	17	13	14
U.S. and Canada	2,666	2,632	2,636	2,726



PETROLEUM ENGINEER INTERNATIONAL (USPS 01648321) published 15 times each year, monthly plus March 15, July 15, and November 15, by Energy Publications Division, Harcourt Brace Jovanovich, P. O. Box 1589, Dallas, Texas 75221-1589. Accounting and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. November 1984, Volume 56, No. 13. Copyright © 1984 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Subscription rate to personnel employed by companies involved with exploration, drilling, or production of oil or gas: one year $16.00, three years $32.00 for North, Central, and South America. Outside North, Central, and South America: one year $35.00, three years $55.00. Subscription rate for all others: $50.00 for one year. Single copy price $3.00. Second class postage paid at Duluth, Minnesota and additional mailing offices. Microfilm copies are available through University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Michigan 48106. Indexed by Applied Science, Technology Index, and the Engineering Index, Inc.

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Postmaster: Send address changes to Petroleum Engineer International, P.O. Box 1589, Dallas, Texas 75221-1589, USA.

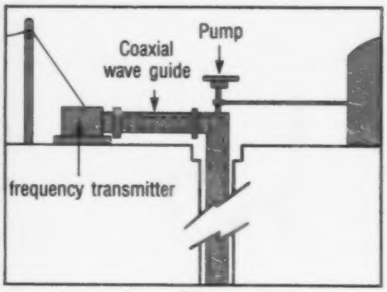
Petroleum Engineer® INTERNATIONAL

The international magazine
of methods for engineering/
operating people

NOVEMBER 1984

NUMBER 13 VOLUME 56

36



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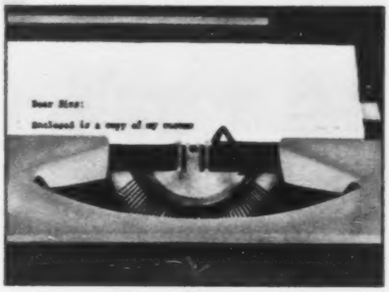

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PRODUCTION IMPROVEMENT

What Operators Say About Fiberglass Sucker Rods 21

by W. B. Bleakley, Editor. When introduced about 10 years ago, fiberglass rods brought with them a host of operating problems. The present generation of rods, however, coupled with today's technology, works well in many applications.

How To Treat Seawater For Water Injection 28

by Monica A. Jorque, Bechtel Petroleum Inc. In addition to dealing with the special corrosion and scale control problems seawater presents, the treatment scheme must be able to produce water of suitable quality for injection.

Niper–Where It Stands And Where It's Headed 36

In an exclusive interview, Richard H. Snow, Herbert B. Carroll, and L. W. Browne say that the National Institute for Petroleum and Energy Research offers its capability to any company in the industry that wants to take advantage of it.

Failure Analysis Isolates Production Problems 46

by Stanford A. Smith Jr. and James D. Garber, University of Southwestern Louisiana, and Larry R. White, Weintritt Laboratories. Although most failures are related to corrosion, most of them are prompted by improper handling of the metals.

Radio Energy May Boost Heavy Oil Recovery 50

by W. B. Bleakley, Editor. Hoped-for test results should substantially increase production to several barrels per day or more, depending on pressure and other characteristics of the 45-ft-thick, clean-sand reservoir.

What's New In Production? 56

Among production-related products outlined is an invertible packer that has been designed with a safety release provision. There's also a unique belt-driven machine that can be tuned to optimize the characteristics of other pumping components.

Survey Offers Pointers For Engineering Recruits 60

by R. L. Branch, Sohio Petroleum Co. Mergers and the reduction in the number of independent companies are reducing manpower requirements. In addition, many experienced engineers are willing to accept entry-level positions.

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ABOUT THE COVER: Pumping jacks are among the most visible pieces of production equipment in the oil patch. Photo courtesy of The Commonwealth Group Inc., Nashville, Tenn.

NEXT ISSUE: The Offshore Operations Report on November 15 will contain the complete International Fall Rig Locator.

Offshore Activity To Increase In 1985

The year 1985 will be one of expansion for the offshore drilling industry, but changing markets will see some types of drilling equipment in great demand while others will face early retirement. In addition, the number of drilling contractors in the offshore business will decline, according to Loran R. Sheffer, president of Offshore Data Services Inc., Houston, Tex.

He told an IADC/PESA Drilling and Production Marketing Conference in Houston recently that many offshore contractors are entering 1985 financially depleted, and the market may not revive fast enough to keep all of them in business.

A multi-tiered capability and investment structure continues to develop, he said, causing a more complex marketplace, with narrow niches of opportunities. The high-technology market, for example, particularly in deep water and in the arctic, should benefit those capable of participating. The commodity market is highly competitive, particularly in the Gulf of Mexico, where the lowest cost rig operator (compatible with crew quality) will fare best.

A new generation of drilling rigs will be built as the industry involves itself more in frontier areas. Costs are enormous, however, so there may be more direct investment by oil firms in building such units. Sheffer looks for the next rig-building boom to be centered on national interests and the larger, established contractors. Fewer units will be built than during previous building booms. But total investment could be as great as before because specialized units are expensive.

Subsea work will become commonplace, expanding markets for floating rigs for development drilling. And floating production systems will be stressed as the industry moves into deeper water.

The mobile offshore rig fleet had an 86% utilization rate in early August 1984, almost 10 percentage points up from the August 1983 low of 76.5%. Worldwide, there were 103 idle offshore rigs in August 1984, compared with 161 idle rigs a year earlier. In the Gulf of Mexico, there were 245 units in August 1984, with 34 idle, compared with 212 and 93 idle a year earlier.

Two markets – the North Sea and the Gulf of Mexico – account for more than half of the world's rig fleet. The North Sea is the pivotal semisubmersible market, and the Gulf of Mexico is the pivotal jackup market. The Gulf of Mexico-North Sea offshore fleet population rose from 240 to 344 units from January 1982 to August 1984, an increase of 104 units. Working rigs increased by 65 units, from 240 to 305. These are record levels. With 211 mobile rigs at work in the Gulf of Mexico and 94 in the North Sea, the utilization rate for this combined market is 88.6%.

The Jim Cunningham, one of the newest semisubmersibles in Reading and Bates Corp.'s rig fleet, now is drilling offshore China.

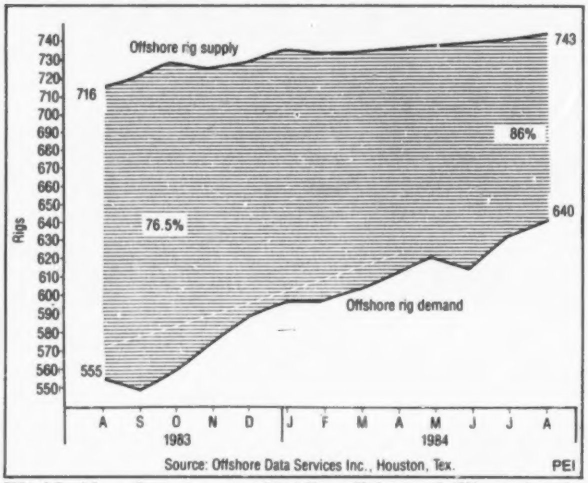
In addition, encouraging acreage offerings are scheduled by the UK, Norway, Denmark, and the Netherlands. Big stimulus in the Gulf of Mexico is the area-wide lease sales held during the past 15 months, with as much acreage awarded there as in the previous 11 years.

The world offshore drilling fleet, excluding the Gulf of Mexico and the North Sea, increased from the fourth quarter of 1981 through the third quarter of 1984 by 72 rigs – to a total of 399. Working units increased from 279 to 288, with reversal of the downward trend happening just recently. Idle units steadily increased in number until about mid-1984 despite mass migration of units to the North Sea and the Gulf of Mexico.

Mixed Outlook

More rigs are working offshore today than ever before, yet day rates are near all-time lows. So the 1985 outlook is mixed. Market conditions worldwide are expected to be much better in 1985. Many African drilling programs are planned, in Liberia, for example, and in Togo, Benin, Madagascar, Mauritania, and, likely, Tunisia and the Ivory Coast. In addition, offshore drilling programs in Egypt, Nigeria, Gabon, Cameroon, Cabinda, and Angola will continue.

Drilling offshore India may accelerate. Indonesia's



Source: Offshore Data Services Inc., Houston, Tex.

Worldwide, there were 103 idle offshore drilling rigs in August 1984, compared with 161 idle rigs a year earlier.

pace should quicken – Pertamina is speeding up processing of budget and work programs. And activity also will occur in the Bahamas, Pakistan, Belize, and the Philippines. African and Southeast Asian activity, therefore, plus scattered work elsewhere, will be enough to tighten rig supply.

In predicting future Gulf of Mexico activity, a rule of thumb is that one exploratory well will evaluate 2,500 acres, considering multiple appraisal wells on given tracts, as well as tracts that are not drilled. Also, a rig will average five exploratory wells per year. Spreading the activity on almost 14 million acres over the lease terms, which in some cases are 10 years, translates into a demand for 220 rigs to explore the Gulf.

Three years ago, about 15% to 20% of development drilling in the Gulf of Mexico was done by mobile rigs. Today, the figure is more than 50%. Low day rates are partly the reason, but the fact is that discoveries, mainly in less than 300 ft of water, are trending smaller, which means smaller platforms. With cantilever jackups, development drilling can be expected to continue to be a major market for mobile rigs.

Shortages Foreseen

Assuming that development drilling continues to employ 100 mobile rigs, demand created by new leases will call for a 320-unit fleet, or about 110 more rigs than currently are working in the Gulf of Mexico. And, 220 units drilling wildcats will discover proportionately more fields, which, in turn, will increase the amount of required development drilling.

There are 36 mobile units under construction at this writing, with 10 scheduled for late 1984 delivery. About half are floaters. But the new generation semis are larger and winterized. Since the beginning of 1984, eight orders have been placed for large, deepwater, harsh-environment semisubmersibles, with plans being made for another nine units. Prospects of new Alaskan activity, year-round drilling above the 62nd parallel off Norway, granting of more Canadian and Norwegian licenses, and a series of promising discoveries in these areas are catalysts behind this semi building boom.

The Gulf of Mexico will require more semis to explore the 5.5 million acres leased in more than 300 ft of water. These semis will be older units pulled out of the North Sea and elsewhere. This will leave a void that will be filled by the new generation semis.

Before the five area-wide sales, there were 18 semisubmersibles in the Gulf of Mexico. In mid-1984, there were 34. From 15 to 20 additional floaters may need to be moved in to meet expected demand. About 39% of the new acreage from the five area-wide lease sales is in more than 300 ft of water, but only 17% of the Gulf fleet, including both semis and drillships, can drill in waters that deep.

Deepwater development technology's leading edge will take place in the Gulf of Mexico, replacing the North Sea's leadership during the past 10 years. All ingredients are in place. Plenty of ultradeepwater acreage is available, with 14% of new leases in more than 1,500 ft of water; the environment is mild; the support structure is well developed; the government is stable, and the likelihood of discoveries is good.

Jackup Market

The jackup market is expected to recover more slowly than the semi market. Between 1979 and year-end 1983, the international fleet added 249 jackups. In mid-1984, there were 92 idle jackups. A heavy jackup retirement program is anticipated. Seven were retired in the past 18 months, and another nine units are slated for retirement shortly. Another 21 jackups are older than 20 years, so they are prime retirement candidates.

Profitability

Good profitability is not expected to return until utilization exceeds 90% or 95%. Then, about 40 rigs will be idle. But certain segments of the rig fleet will return to profitability before others. Semisubmersibles, whose day rates have risen to the low $40,000s in the Gulf of Mexico, already are becoming profitable.

Half of the Gulf of Mexico's jackup rigs can show a profit at rates of less than $20,000 a day. Rates in the Gulf right now are in the $12,000 to $16,000 range, as they are almost everywhere, except for the North Sea and such harsh-environment areas as Canada and Alaska. As the shortage of large cantilever rigs in the Gulf tightens, however, day rates may increase there to the high $20,000s or low $30,000s.

Next year, therefore, should be better for offshore drilling rig operators than 1984. But there still are some for whom the main goal of 1985 will be to stay alive.

Buoys Deployed In North Atlantic

Two of what are called the most advanced weather monitoring buoys in the world now are operating for the UK Offshore Operators Association in the North Atlantic, where they are providing meteorological and oceanographic data for Britain's offshore oil and gas industry.

The buoys, designed and built by Thorn EMI Electronics of Woking, England, are moored on the edge of the UK continental shelf in 600 ft of water. One is

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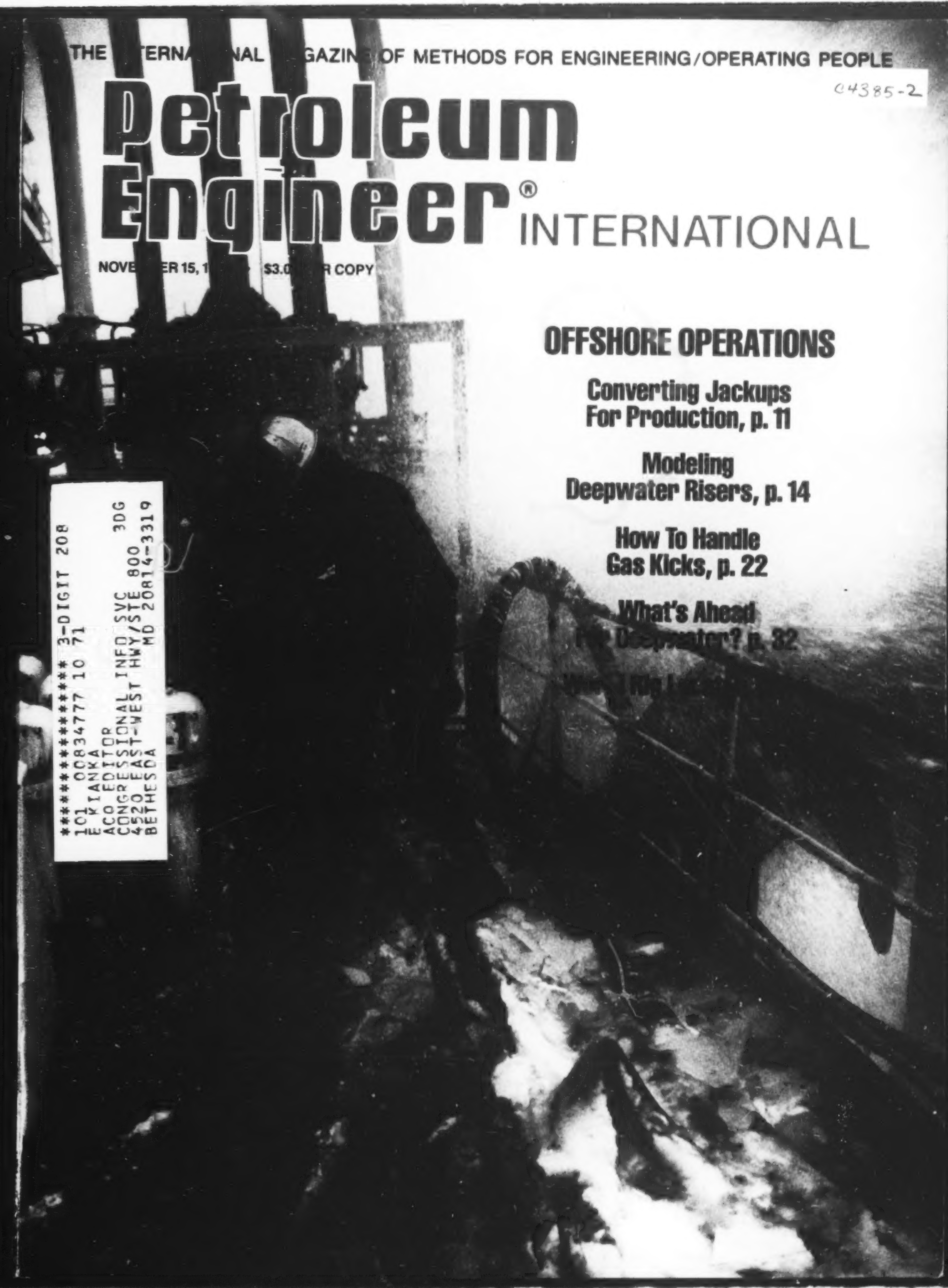

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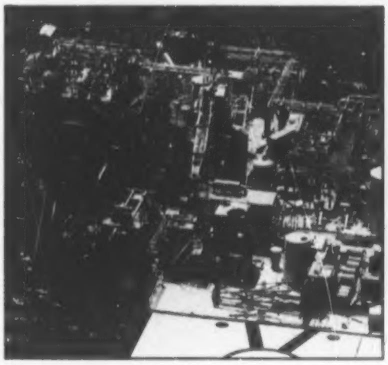
NOVEMBER 15, 1984 NUMBER 14 VOLUME 56



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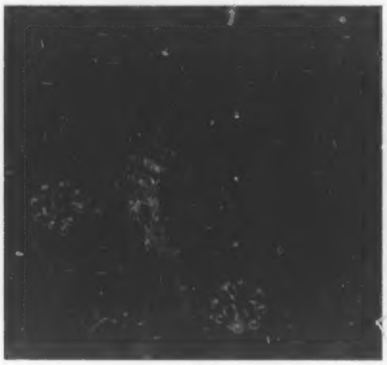

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OFFSHORE OPERATIONS

Odeco Succeeds With Converted Jackups 11

by Steven D. Moore, Drilling Editor. Actual conversion of the rigs into production platforms required few changes. The derricks and substructures were removed, reducing the overall deck load and adding more available deck space.

Modern Production Risers, Part 14 14

by George W. Morgan, Engineering Consultant. Riser-dynamics studies call for complete information on both forcing and response functions to be simultaneously recorded, along with related data on variations that occur at the boundaries.

How To Handle Acid Gas H_2S And CO_2 Kicks 22

by W. R. Matthews, Engineering Consultant. Predicting the behavior of a gas bubble is done by applying a basic physical law governing gas behavior. Namely, if the pressure on the gas is decreased, the gas will occupy more space.

What Structures To Expect For Deepwater Developments 32

by W. B. Bleakley, Editor. Design studies will concentrate on how to reduce weight and space requirements because payload magnitude and weight distribution needs will control stability and response of floating facilities.

World Rig Locator R-1

Almost 4,500 drilling rigs operated by 646 drilling contractors around the world are covered in an exclusive feature that includes rigs operating or available both on land and offshore. Some 1,003 of the listings are for offshore rigs.

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ABOUT THE COVER: This view of life offshore was taken aboard Sonat Offshore Drilling's semisubmersible John Shaw off the coast of Newfoundland. (Courtesy Sonat Inc. Photo by Ron Sherman.)

NEXT MONTH: This year's Area of Promise is Shallow Wells, and the December issue will focus on their technology as well as their impact on the oil and gas industry.

What Structures To Expect For Deepwater Developments

by W. B. Bleakley, *Editor*

The April and July 1984 lease sales in the Gulf of Mexico (Nos. 81 and 84) opened the door to speculation on the type of platforms or production facilities that will be selected for field development. Water depth covered by these lease sales varies up to 3,500 ft, calling for high technology to make field development economically attractive.

Despite the downturn in the economy, particularly in 1983, there has been no obvious slowdown in deepwater drilling (Table 1).

In 1982, 88 wells were drilled in water deeper than 600 ft. A slight decline in 1983 reduced this number to 80. Final totals for 1984 should show approximately 35, with another 20 off the Pacific Coast, most in water depths of approximately 1,000 ft. Much of this activity is related to recent offshore California lease sales.

In the U.S. Atlantic, five wells in deep water can be expected, one possibly in water 7,300 ft deep. We also expect at least 60 deepwater wells offshore eastern Canada. Outside North America, some 50 wells can be expected, mostly offshore Norway.

R & D Needs To Reach Deepwater Goals

Topic	Benefit
Surface wave effects	Reduction of shear forces and overturning moments for fixed platforms
Directional sea spectra	Improved metal fatigue analysis for fixed structures and motion calculations for floating structures
Long period wind gust and wave environmental spectra	Improved long period and surge motion predictions for floating structures
Reducing weight and space requirements of equipment	Cheaper deepwater floating production facilities
High-pressure fluid swivel and high-pressure, large-diameter hoses	Makes tanker-based floating production systems possible
Motion dampening data for FPS	Improved motion predictions
Flexible transfer hose; dynamic, fatigue, and performance data	Improved design of flexible connections for floating production systems

Conventionally, water 600 ft deep is assumed to be deep water. Diver operations there become difficult, cumbersome, dangerous, and expensive.

In the near future, deepwater operations can be expected in the northern North Sea, where hydrocarbons in commercial quantities have been found in water approximately 1,100 ft deep off Norway. Other northern North Sea areas, also bordering the 1,000-ft mark, are considered for development.

The most important considerations for any development are:

- Investment prior to production.
- Return of investment.
- Project duration before production.

It is necessary, therefore, to know what kind of structure one will use for development. Recent northern North Sea feasibility studies for platform development in 1,000 ft of water revealed what kind of expenditures are necessary. The results of these studies are summarized in Table 2. A payload of 30,000 tons was considered for all structures. The structural weight required to support such a deck load varies with the type of structure.

For a standard jacket, 75,000 tons of steel might be required for the jacket and piles. For a tension-leg platform, about 86,000 tons are required, while a guyed tower and a tanker-based or a semisubmersible-based floating production system require considerably less.

The cash layout also varies greatly. For a standard jacket, $300 million may be required for the as-installed structure alone, about twice as much for a tension-leg platform, $450 million for the guyed tower, and approximately $150 million for a floating production facility.

The lead time to production does not vary substantially for fixed or bottom-fixed structures, and it is only significantly shorter for the floating production system – about 2½ years after contracting.

Annual maintenance cost also must be considered in economic calculations. A standard jacket may require up to $100 million because of required joint inspections. A tension-leg platform might require half as much, while a guyed tower would be more, considering the uncertainty of inspection requirements for the guy lines. A tanker-based system might require less because very little of the structural part is located deeply under water.

Structure removal cost is not often discussed, but a jacket and guyed tower may require almost as much to remove as to install.

The first tension-leg platform, the 95-ft draft TLP for the Conoco Hutton field, was installed earlier this year. Set in 485 ft of water, the TLP has a maximum design capacity of 110,000 b/d of oil from a 32-slot preset seabed template.

Removal cost of a tension-leg platform or a floating production system is considerably less.

Gulf of Mexico Costs

Although the Gulf of Mexico has a much less severe environment than the North Sea, the cost of potential structural developments in deep water is impressive. In Fig. 1, the estimated development costs for a structure supporting 30 wells with 12,500 tons of payload on the deck are plotted as a function of water depth for various structure types. Well and production equipment costs are not included.

As shown, standard jacket developments can be expected up to a water depth of approximately 1,600 ft. Yard facilities and installation equipment are available for this. Guyed towers may adequately fill the gap from 1,500 to 2,000 ft. In 1,500 ft of water, standard jacket development may cost approximately $425 million; guyed towers for that water depth and up to 2,000 ft are approximately $500 million. Tension-leg platforms may be less costly than fixed platforms over the range of 1,500 to 2,000 ft of water, but floating production systems are expected to be substantially cheaper in the range of 1,500 to 3,000 ft.

Since the cost of production equipment is not included in Fig. 1, the cost of floating production facili-

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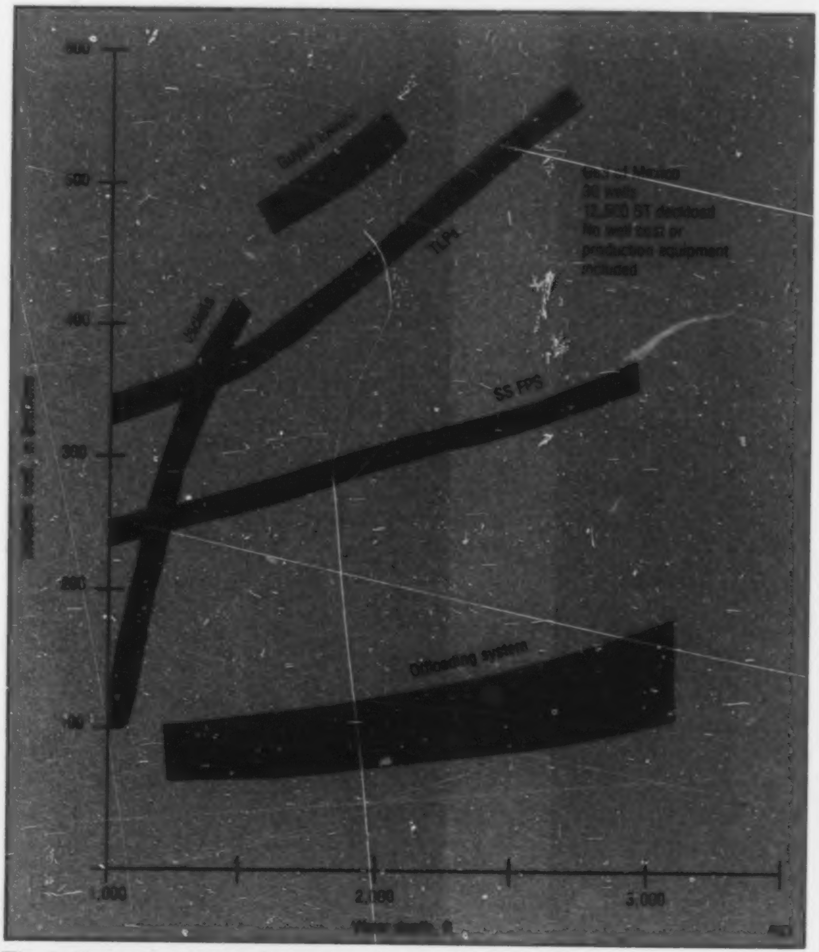


Fig. 1. Cost estimates for deepwater platform developments.

TABLE 1. Number of deepwater wells (water depth greater than 600 ft)

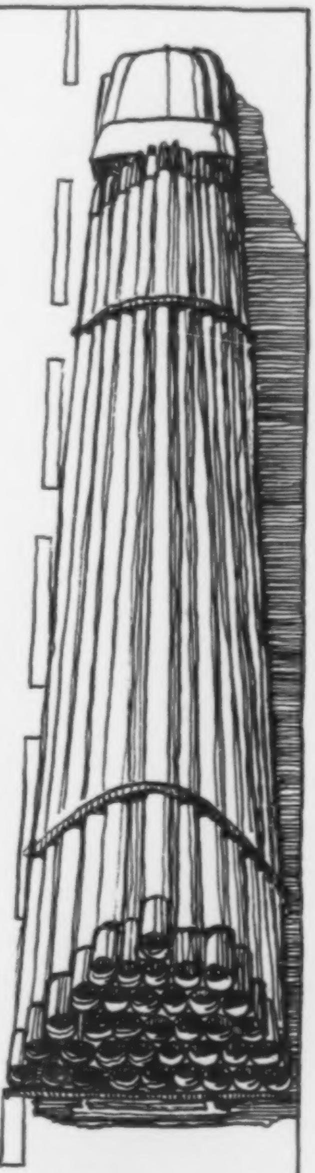
1970	10
1971	12
1972	9
1973	9
1974	18
1975	43
1976	72
1977	60
1978	51
1979	95
1980	80
1981	85
1982	88
[illegible]	[illegible]

ties is perhaps shown too favorably. Expensive subsea wellhead completions and product transfer and control systems are necessary.

Without a pipeline, one must consider the need for an offloading system. One type of offloading system is shown in Fig. 2. In deeper water a tanker-yoke-buoy system probably will be considered because such a system has been proven in shallower water. A stiff-leg mooring is possible, but may not be developed for smaller fields because of the higher cost than catenary mooring.

The fluid transfer from the seabed to the buoy also requires some development of technology. It is anticipated that a flexible transfer hose will be used, connected to a base template with a full joint-type connection. Near the water surface it connects to a buoyancy tank, then to the buoy. This buoyancy tank must be located close to the sea surface, as a deeply located buoy would behave like a surfacing rocket in case of hose failure.

Design technology for this application is in its infancy. Nevertheless, preliminary cost studies have been prepared (Table 3). Noncontingencies were added in Table 3, so the numbers shown are lower than those in Fig. 1. *(Continued)*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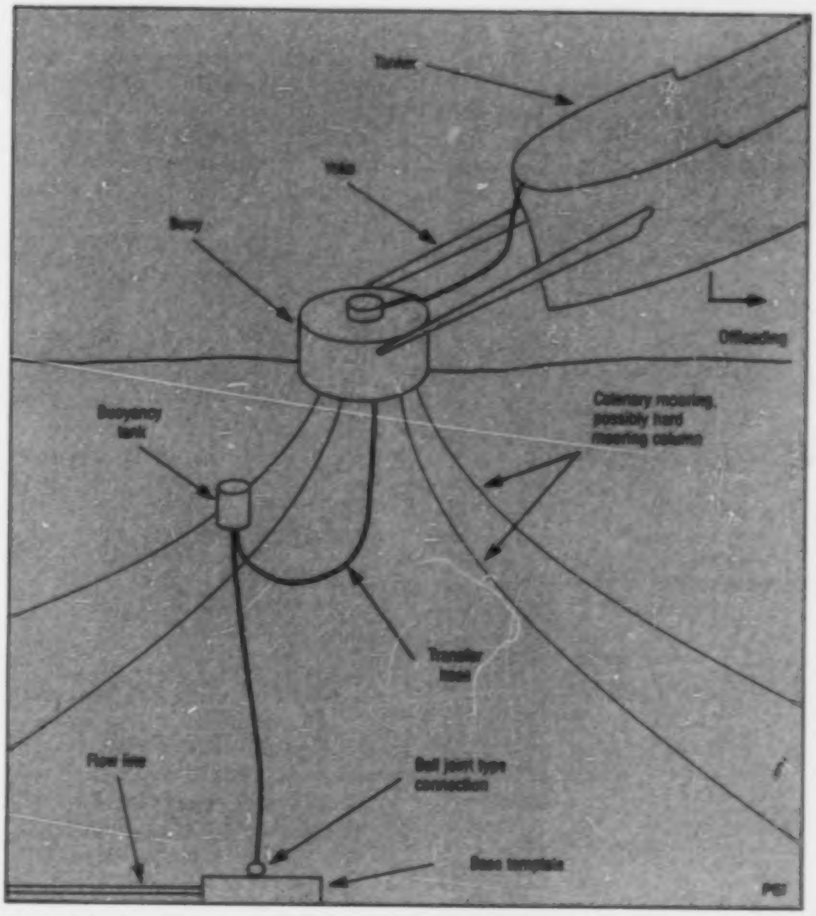

Fig. 2. Weathervaning tanker storage and offloading system.

Mooring in deep water is not cheap. Mooring a tanker to a buoy in 1,000 ft of water may cost $45 million, as Table 3 shows. Even this mooring system may require some new developments. A taut mooring system may be required to connect to driven piles, because seabed abrasion by sand on mooring lines must be prevented.

Current practice for semisubmersibles in the North Sea dictates that anchor lines which run over the seabed are modified every 3 months by changing anchor locations or paying out line to prevent chafing of the chains over the seabed. Underwater pile driving equipment for anchor piles for the catenary mooring systems, and for structural piles, in 3,000 ft of water is currently not available but can be developed. The technology for such a pile installation is available.

Cost figures in Fig. 1, Table 2, and Table 3 indicate floating production facilities must be seriously considered. The industry has experience with such systems in the Brazilian Garoupa field, the North Sea Argyll and Buchan fields, and Sun Oil will install one in the Balmoral field in the northern North Sea. These systems have no high pressure or water injection from the floater. Excess gas is flared. However, for developments now foreseen, gas and possibly water injection cannot be avoided if pipelines do not exist. Therefore, high-pressure hoses must be available if floating production facilities are to be used at all.

If the floating system is based on a weathervaning tanker system, a high-pressure liquid and gas transfer swivel also is required. Without it such a system is impossible. Industry is currently developing the technology and production capability of both the high-pressure hoses and the high-pressure fluid swivel transfer systems. Shell UK installed a successful weathervaning

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floating storage facility in its Fulmar field. This tanker-based system does not carry production facilities, as processing of the crude oil takes place on a nearby platform.

Shell Tunirex uses a gravity-base single anchor mooring system equipped with a high-pressure swivel in its Tazerka field off Tunisia (PETROLEUM ENGINEER INTERNATIONAL, October 1983, p. 44).

Structural Concepts Compared

Predrilling of wells is required for early production systems. This is most economically accomplished if a TLP or floating production system is used. Wells predrilled through a template under such a structure are easily serviced from the structure's deck, at the rate of about 20 per year per service rig, because of fairly easy access to the well bore.

Subsea completions predrilled for early production, whether through a template or at single locations throughout the field, require the use of a floating servicing rig. And the time needed for each entry to the well bore is greater, since the Christmas tree is on the ocean floor. The capacity of a floating servicing rig is only about 20 service jobs each year, resulting in much higher costs. Subsea completions have the advantage of providing for development of a larger field because wells can be placed anywhere on the ocean floor, with a minimum of directional drilling required. A major disadvantage is the congestion created on the seabed by the large number of flow lines, control lines, and communication cables.

For the northern North Sea area, payload capacity may be a problem for a semisubmersible-based floating production facility. This makes a tanker-based system more attractive, but tanker-based floating production facilities require more development, in terms of high-pressure swivels and high-pressure hoses.

Earthquake sensitivity is low for floating systems but high for fixed structures. And there is a difference in the amount of damage if a blowout and a subsequent fire occur. For a floating facility, one can simply cut the mooring lines and move off location; a fixed facil-

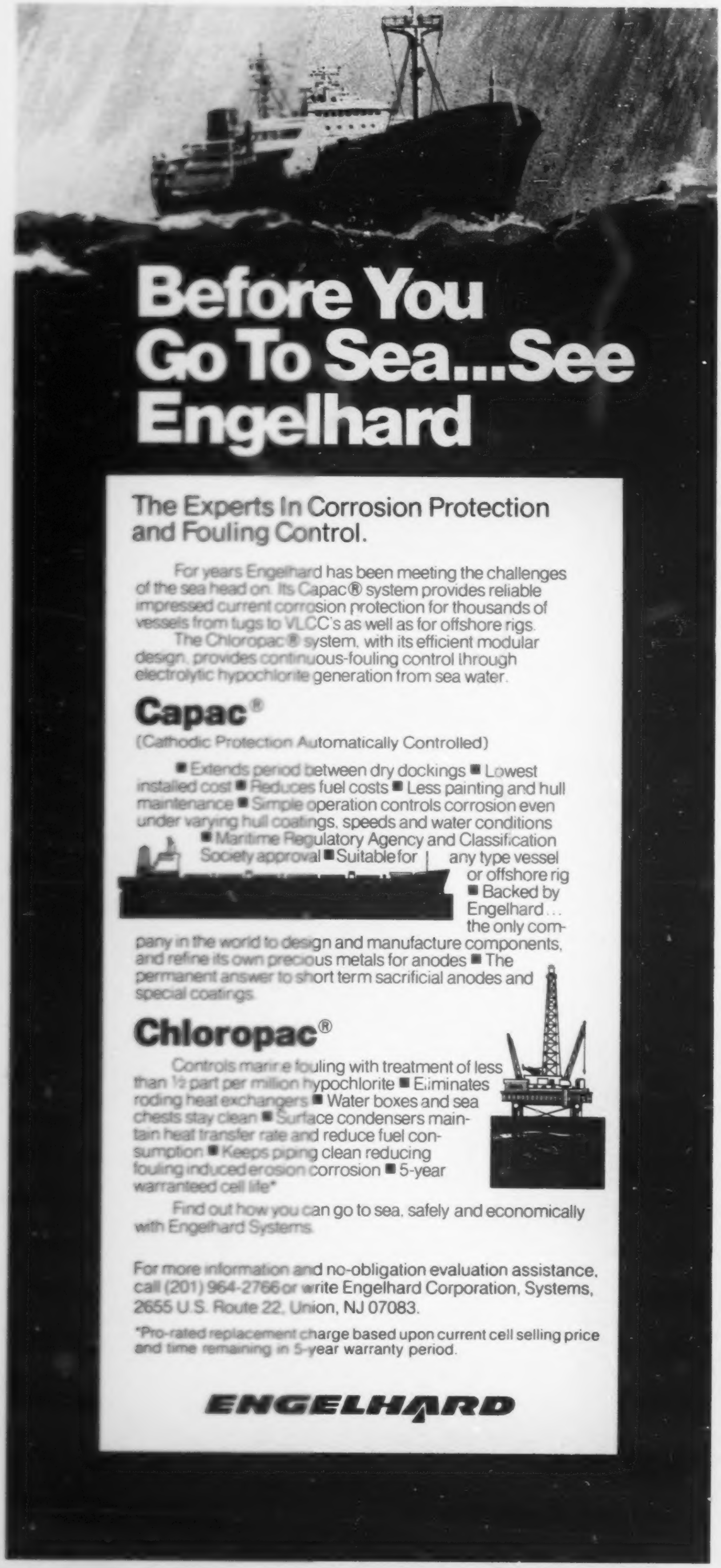

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TABLE 2. Comparison of deepwater structural concepts for the North Sea in 1,000 ft of water

	Fixed platform	Guyed tower	TLP	Stiff leg, tanker-based FPS	Semisubmersible-based FPS with flexible risers
Lead time to positive cash flow, years	5	5	5	2½	2
Structural weight, ST	53,000	25,000	70,000	Tanker + 5,000	Semisubmersible + 3,000
Pile weight, ST	22,000	10,000	16,000	2,500	5,000
Platform cost as installed, MM$	300	450	600	150	150
Annual maintenance cost, MM$	100	150	50	20	20
Structural removal, MM$	200	250	75	50	20

TABLE 3. Cost of deepwater offloading system (30,000 b/d production), in MM$

Water depth, ft	50,000-ton tanker + conversion	Yoke + buoy + swivel	Buoy mooring	Flex hose	Hose template	Total
1,000	20	10	8	2	5	45
3,000	25	10	45	4	5	94

ity or a TLP stands to suffer a substantial amount of damage.

Improvements to the available technology and in the theoretical capabilities of the designers are only needed for deepwater facilities which rely on floating production systems. For deepwater fixed platforms, fabrication capacity and the installation capability are the main problems. These factors also contribute to a difference in the water depth capabilities of the various types of platforms, which also are listed in Table 4.

For all platforms except floating facilities, fabrication, transportation, and metal fatigue damage are critical when one tries to derive a water depth limitation for a particular concept. For floating facilities, the water depth limitation of the system is controlled by the availability of subsea control equipment and the ability to moor the vessel or the floating facility on a permanent basis.

Research Needs

The summary at the beginning of this article lists environmental, general research, and hardware needs for various types of deepwater production facilities. More accurate environmental force predictions would lead to a less conservatively computed wave load on the structure, and more realistic dynamic force history on the structure is needed for metal fatigue damage calculations.

To improve these aspects of the calculations, formulations of wave forces near the surface and a specification of the directionality of design waves are needed. Because floating production facilities have long surge natural periods, long period wind gust and wave environmental spectra are additional design criteria which are not available to the required level of confidence today.

Design studies will concentrate on how to reduce weight and space requirements of drilling and production equipment, because the payload magnitude and weight distribution needs will control vessel stability and response. As mentioned before, the high-pressure fluid swivel and high-pressure, large-diameter hoses are needed when one wants to apply a deepwater floating production facility in an offshore location which is not

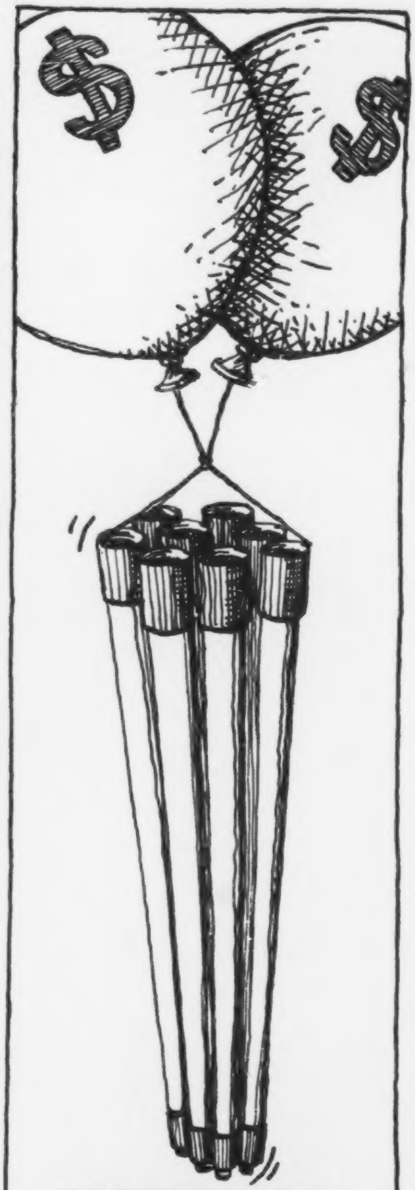

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TABLE 4. General comparison of structural concepts

	Fixed platform	Guyed tower	TLP	Tanker-based FPS	Semisubmersible-based FPS
Predrilling through template	Yes	Perhaps	Yes	Must	Must
Maximum number of wells	65	40	40	15	20?
Subsea completions	Perhaps	Perhaps	Perhaps	Must	Must
Field development flexibility	None	None	None	High	High
Seabed congestion by flow and control lines	No	Anchor lines	No	Flow lines	Anchor, flow, and control lines
Payload capacity	High	High	High, but sensitive	High	Low and medium
Priority development needs	Perhaps joint inspection, platform repair	Perhaps in-situ guy inspection, platform repair	Simplified tendon design	HP swivel, HP hoses for gas reinjection	HP hoses for gas reinjection, subsea manifolding, and control equipment
Earthquake sensitivity	High	Medium	Low	Medium	Low
Loss in case of fire	Platform top, new deck	Platform top, new deck	Platform top new wellhead area	Well	Well. Abandon site
Theoretical improvement enhancing capabilities	None	None	None	Tanker	Hose dynamics
Water depth capability, ft, Gulf of Mexico N. North Sea	1,350 1,000	2,000 1,350	2,000 + ?	1,500? ?	2,000? 1,500?
Critical depth limitation	Fabrication, transportation, fatigue	Transportation, fatigue	Fabrication, buoyancy needs, tendons, dynamic roll and heave	Mooring, subsea control equipment	Mooring, subsea control equipment

The seabed template for Sun's Balmoral field was installed last July. The first proposely built floating production vessel is incorporated into the field development scheme for Balmoral.

located near a pipeline system.

Cost of floating production facilities could further be reduced if a better understanding of the structural motions could be gained from calculations. Better motion dampening data for floating production facilities are needed. Further, dampening data and other dynamic properties for flexible transfer hose systems are required.

The cost figures in Tables 2 and 3 and Fig. 1 indicate that a potential candidate for structural developments in the Gulf of Mexico could well be a semisubmersible-based system. Fluid transfer and control lines are all flexible, and water injection and possibly gas injection are also possible when high-pressure gas hoses are available. Vessel mooring will be by a catenary system, although mooring buoys must be used to reduce the weight of the mooring system carried by the vessel.

As in all other cases, a major oil field must be found before such a system is economically feasible. ■

FALL 1984 INTERNATIONAL

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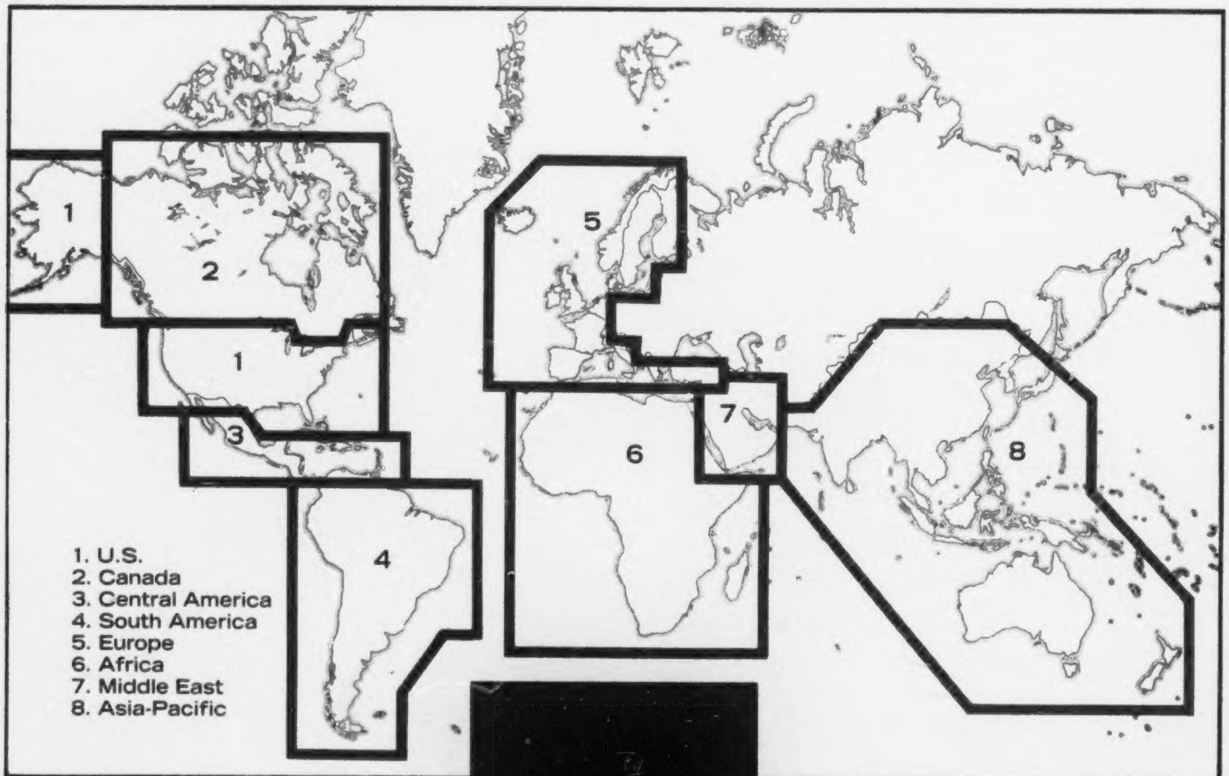

(Photo by Randall Hahn, Dallas, Tex.)

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CHEYENNE DRILLING PO Box 916 Garden City KS 67846 316-277-2062
CHILES DRILLING CO 1900 West Loop South Ste 1400 Houston TX 77027 713-621-4991
CHINA NATIONAL OFFSHORE OIL CORP (managed by Houlder Marine Drilling Ltd)
CINCO DRILLING CO 2300 Interfirst One Dallas TX 75202 214-741-6031 512-672-7983
CLEVELAND DRILLING CO 3131-A Fairhaven Dr Bakersfield CA 93308 805-395-0233
CLIFFS DRILLING CO Citicorp Center Ste 300 Houston TX 77002 713-651-9426
C M D DRILLING CO 1331 Oakhurst Wichita Falls TX 76302 817-767-8432
COASTAL DRILLING CO 2157 Mohawk St PO Box 5787 Bakersfield CA 93388 805-589-0210
COLEMAN DRILLING CO PO Drawer 3337 Farmington NM 87401 505-325-6892
COMANCHE DRILLING CO PO Box 636 Cut Bank MT 59427 406-873-5731
COMET DRILLING CO Box 51529 Lafayette LA 70505 318-233-0414
COMPADRE DRILLING & EXPLORATION CORP PO Box 97 Ardmore OK 73402 405-223-3127
COMPANIA GEN DE SONDEOS SA Corazon De Maria No 15 Madrid 28002 Spain 413. 53. 63
COMPANIA NAVIERA PEREZ COMPANC SACFIMFA Maipu 1 1599 Buenos Aires Argentina 33-8393/7 Telex 17211 PECOM AR
CONCEPT RESOURCES LTD 1200 McFarlane Tower 700 Fourth Ave SW Calgary AB T2P 3J4 Canada 403-265-6982
CONTINENTAL DRILLING CO PO Box 8569 Tyler TX 75701 214-877-3151
CORPUS CHRISTI DRILLING CO PO Box 8400 Corpus Christi TX 78412 512-993-8830
COSIFOR 21 Ave Victor Hugo 75116 Paris France (1) 502 10 60
COSIFOR 90 Avenue des Ternes 75017 Paris France (1) 574 35 79
COTHRUM DRILLING CO PO Box 18207 Dallas TX 75218 214-321-9115
CRC MALLARD INC PO Drawer 51498 OCS Lafayette LA 70505 318-233-4922
CRESCENT DRILLING CO Calhoun Rd PO Box 626 Owensboro KY 42301 502-926-4656
CROWN DRILLING LTD PO Box 1390 Trans-Canada Hwy Virden MB R0M 2C0 Canada 204-748-1714
CULVER DRILLING CO PO Box 75382 Oklahoma City OK 73147 405-324-6000
CYCLONE DRILLING INC PO Box 908 Gillette WY 82716 307-682-4161

D

DAHLQUIST DRILLING INC PO Box 602 Bakersfield CA 93302 805-327-1275
DAMAC DRILLING INC PO Box 1164 Great Bend KS 67530 316-792-1353
D & D DRILLING CO PO Box 351 Ferriday LA 71334 318-757-3274
D & R DRILLING INC PO Box 4431 Odessa TX 79760 915-563-3550
D L DAVIS DRILLING CO PO Box 570 Rte 1 N Mt Carmel IL 62863 618-263-4316
D B DRILLING CORP PO Box 3037 Abilene TX 79604 915-672-2841
DEAN DRILLING CO PO Box 327 Cherokee OK 73728 405-596-3509
DELTA DRILLING CO PO Box 2012 Tyler TX 75710 214-595-7700
DEUTSCHE TIEFBOHR AG Deilmannstr 1 PO Box 75 4444 Bad Bentheim West Germany 5922-720
DEVONIAN DRILLING CO 500 W Wilson Bridge Rd Ste 70 Worthington OH 43085 614-885-2268
DIAMOND M CO PO Box 4558 Houston TX 77210 713-490-5300
DIATOM DRILLING CO PO Box 5004 Borger TX 79008-5004 806-273-3763
DIXILYN-FIELD DRILLING CO PO Box 4251 Houston TX 77210 713-877-8850
DIXON DRILLING CO PO Box 2773 Abilene TX 79604 915-676-8564
DOLPHIN TITAN INTL INC 333 Clay St Ste 2600 Houston TX 77002 713-659-2381
DOUGLAS DRILLING INC PO Box 3775 Abilene TX 79604 915-676-5551
DRILCON INC 9099 Westheimer Ste 309 Houston TX 77063 713-780-8772
DRILLERS INC 5629 FM 1960 W Ste 202 Houston TX 77069 713-893-1020
DRILLTECH INC 2 Northpark E Ste 800 PO Box 31350 Dallas TX 75231 214-369-6699 214-363-9705
DUAL DRILLING CO 5956 Sherry Lane Ste 700 Dallas TX 75381 214-373-6200
DUKE DRILLING CO PO Box 823 Great Bend KS 67530 316-793-8366
DUNNE-GARDNER PETROLEUM INC 200 W Douglas Ste 250 Wichita KS 67202 316-265-1611
DYVI OFFSHORE A/S PO Box 454 Sentrum Oslo 1 Norway (02) 410100

E

EAGLE DRILLING INC PO Box 8609 Wichita KS 67208 316-682-5513
E & H DRILLING CO PO Box 1058 Graham TX 76046 817-549-0370
EASON OIL CO Sub of ITT 2601 NW Expwy Oil Center East Ste 1100E Oklahoma City OK 73102 405-848-8711
EDCO DRILLING CO PO Box 645 El Dorado KS 67042 316-321-9280
EDWARDS WELL SERV 7001 Fruitvale Extension Bakersfield CA 93308 805-589-0111
EGYPTIAN DRILLING CO Dr Moustafa Abou Zahra St PO Box 8071-11371 Nasr City Cairo Egypt 600-230 (927) 92667 EDRLG UN
ELENBURG EXPLORATION INC Hwy 2 W PO Box 1850 Havre MT 59501 406-265-5811
ELJAY DRILLING CORP 11757 Katy Fwy Ste 850 Houston TX 77079 713-932-6771
ENERGY DRILLING CO PO Box 905 Natchez MS 39120 601-446-5259
ENERGY SEARCH DRILLING CO PO Box 190 Farmington NM 87401 505-326-1135
ENOPCO 12201 Merit Dr Ste 1100 Dallas TX 75251 214-387-2805
ENSIGN DRILLING LTD PO Box 1160 5109-63 St Lloydminster AB S9V 1G1 Canada 403-875-4942
EQUITY DRILLING CO PO Box 40 Dewey OK 74029 918-534-1700
ESCOR 4273 Corporate Way Mt Pleasant MI 48858 517-773-4922
EXCELL DRILLING CO 6475 Wadsworth Blvd Ste 115 Arvada CO 80003 303-332-3156
EXETER DRILLING CO 210 W Park Ave Ste 2670 First Oklahoma Tower Oklahoma City OK 73102 405-235-9969
EXETER DRILLING CO Northern Division PO Box 17349 TA Denver CO 80217 303-861-0181
EXETER DRILLING CO INC Southern Division 144 Elk Place Ste 1502 New Orleans LA 70112 504-581-1498

F

FAIRMAN DRILLING CO PO Box 288 Dubois PA 15801 814-371-8410
FAITH DRILLING CO PO Box 7 Houston TX 77001 713-524-7411
FALCON DRILLING CO 1700 SE 22 Second Oklahoma City OK 73129 405-670-3161
F & N DRILLING CO PO Box 6854 Odessa TX 79762 915-367-1028
JOHN O FARMER INC PO Box 352 Russell KS 67665 913-483-3144
FAULK DRILLING CO PO Box 429 Breckenridge TX 76024 817-559-3744
FELDERHOFF BROS DRILLING CO PO Box 739 Gainesville TN 76240 817-665-0396
FLUOR DRILLING SERVICES INC 3333 Michelson Dr Irvine CA 92730 714-975-7034
FLUOR DRILLING SERVICES INC 144 Elk Pl #1010 New Orleans LA 70112 504-581-5333
FORAMER 16 Bis Rue Grange Dame Rose PO Box 100 78143 Velizy Villacoublay Cedex France (3) 946.97.17
FORASOL 16 Bis Rue Grange Dame Rose PO Box 100 78143 Velizy Villacoublay Cedex France (333) 946-9717
FOREX NEPTUNE AND/OR AFFILIATES 50 Ave Jean-Jaures PO Box 599 92542 Montrouge Cedex France 746.10.10
FORWEST INC 910 16th St Ste 408 Denver CO 80202 303-573-1661
FOSSIL DRILLING CORP 6 NE 63rd Ste 315 Oklahoma City OK 73105-1496 405-840-9255
FOUR CORNERS DRILLING CO PO Box 1067 Farmington NM 87401 505-327-0322
FRANKLIN DRILLING INC PO Drawer 1237 Graham TX 76046 817-549-5661
FREEMAN DRILLING CO 251 N Water Ste 10 Wichita KS 67202 316-263-7049
FRIO DRILLING CO 1216 Guaranty Bank Plaza Corpus Christi TX 78475 512-883-8555
FWA DRILLING CO PO Box 419 Wichita Falls TX 76307 817-322-0761

G

GABBERT-JONES INC 830 Sutton Place Wichita KS 67202 316-263-6209
GALLAGHER DRILLING INC PO Box 3046 Evansville IN 47730 812-425-8256
GALLOWAY DRILLING CO 340 Broadway Plaza Bldg 105 S Broadway Wichita KS 67202 316-263-1793
GARNETT DRILLING LTD 814-603 Seventh Ave SW Calgary Alberta T2P 2T5 Canada 403-262-7906
GARY DRILLING CO 7001 Fruitvale Extension Bakersfield CA 93308 805-589-0111
GCO DRILLING CO PO Box 3134 Abilene TX 79604 915-695-9410
GEOPROSCO INTL LTD PO Box 938 Abu Dhabi United Arab Emirates 0534 35521
GIBSON DRILLING CO PO Box 1540 Kilgore TX 75662 214-984-5068
J W GIBSON WELL SERVICE CO 3025 S Parker Rd Ste 711 Aurora CO 80014 303-752-2527
GLENDEL DRILLING CO 2761 Old Erath Rd PO Box 765 Abbeville LA 70511-0765 318-898-1637
GLOBAL MARINE DRILLING CO PO Box 4379 550 Westlake Park Blvd Houston TX 77210 713-496-8000
GLOBE DRILLING CO 1212 The Peoples Plaza Tower Tyler TX 75702 214-593-0281
GOLAR-NOR OFFSHORE A/S 105 Victoria St London SW1 6QT England 01 630 1515
GOLDEN STATE DRILLING INC 3312 Fruitvale Ave Bakersfield CA 93308 805-589-0730
GOLDRUS DRILLING CO PO Box 4394 Houston TX 77210 713-658-9271
GOLDRUS MARINE DRILLING CO PO Box 4394 Houston TX 77210 713-759-6337
GRACE BOMAC DRILLING 10403 W Colfax Ste 700 Lakewood CO 80215 303-234-1444
GRACE FRANCE DRILLING Div Grace Drilling Co 700 Travis Place Shreveport LA 71101 318-221-3434
GRACE MILLER DRILLING Rte 5 Box 450 Fort Smith AR 72901 501-646-3481
GRACE/TRG DRILLING CO 3300 NE 60th St Oklahoma City OK 73121 405-478-4880
GRAND DRILLING 920 Hamilton Bldg Wichita Falls TX 76301 817-723-2422
GRAVES DRILLING CO 910 Union Center Wichita KS 67202 316-265-7233
GREAT EASTERN DRILLING & ENGINEERING CO 1904 Shaw Centre 1-Scotts Rd Singapore 0922 7377633
GREAT SOUTHERN OIL & GAS CO PO Box 52707 Lafayette LA 70505 318-233-4400
GREY WOLF DRILLING CO 2000 Post Oak Blvd Ste 1730 Houston TX 77056 713-626-1373
GRIFFIN-ALEXANDER DRILLING CO 13430 Northwest Fwy Ste 100 Houston TX 77040 713-460-1804
GRIM WELL SERVICE INC PO Box 169 Guysville OH 45735 614-662-6295
GUFFEY-SCHLENSKER DRILLING CORP PO Box 831330 Richardson TX 75083-1330 214-231-8551
GUTHRIE McLAREN DRILLING LTD 1760 717 Seventh Ave SW Calgary AB Canada 403-455-3191
GWALTNEY DRILLING CO PO Box 520 Washington IN 47501 812-254-5085

H

HACK DRILLING CO PO Box 5108 Abilene TX 79608 915-692-4111
HAMM DRILLING INC One Perry Plaza Box 17 Perry KS 66073 913-597-5111
H & S DRILLING CO 320 S Boston Ste 2000 Tulsa OK 74103 918-587-8163
HANING & YOUNG DRILLING CO 2910 Holmes Rd Houston TX 77051 713-734-5555
HARKINS & CO PO Box 1940 Alice TX 78332 512-664-3427
HARPEL DRILLING CO PO Box 2811 Casper WY 82602 307-265-9193
HARRIS DRILLING CO Box 99 Hwy 15 Grayville IL 62844 618-375-2211
HARRIS WELL SERVICE INC PO Drawer 949 Eunice LA 70535 318-457-3376
H F HATCHER & SON PO Box 167 Smackover AR 71762 501-725-2436
HEARTLAND DRILLING INC 600 One Main Place Wichita KS 67202-1399 316-265-9723
HELMERICH & PAYNE CA Apartado 16 Anzoategul Venezuela 22691
HELMERICH & PAYNE (COLOMBIA) DRLG CO Apartado Aerco Bogota Colombia 55088 2484249 396-43370 HPCOM CO
HELMERICH & PAYNE DEL ECUADOR INC Avenida Orellana 1682 Quito Ecuador 233-410
HELMERICH & PAYNE (GUATEMALA) DRLG CO 15 Avenida 16-66 Zone 13 Guatemala City Guatemala 66008
HELMERICH & PAYNE INTL DRILLING Utica at 21st St Tulsa OK 74114 918-742-5531
HELMERICH & PAYNE RASCO INC Bolivia Branch KM-3 Carretera A Cochabamba Casilla 3298 Bolivia 28478

H (Cont'd)

HENLEY DRILLING CO 2900 First Natl Bank Bldg Ste 2420 Dallas TX 75202 214-749-0847
HERB EXPLORATION PO Box 1934 Abilene TX 79604 915-672-1291
HICKMAN DRILLING CO PO Box 1467 Woodward OK 73801 405-256-8688
W B HINTON DRILLING CO 1805 N Jefferson St Mt Pleasant TX 72455 214-572-8777
HI TOWER DRILLING Box 6650 Station D 321 Sixth Ave SW 16th Floor Calgary AB T2P 2V8 Canada 403-231-1211
HOLLIDAY DRILLING INC PO Box 3489 Midland TX 79702 915-697-2208
HONDO DRILLING CO PO Drawer 2516 Midland TX 79702 915-682-9401
HOULDER MARINE DRILLING LTD 53 Leadenhall St London EC3A 2BR England 01-481-2020
HOUSTON OFFSHORE INTERNATIONAL INC One West Loop South Ste 804 Houston TX 77027 713-629-1400
HOUTECH ENERGY INC 10701 Corporate Dr Ste 230 Stafford TX 77477 713-240-0116
HOWELL DRILLING INC 635 Milam Bldg San Antonio TX 78205 512-227-5283
H S ENERGY/SENIOR DRILLING CO (See SENIOR DRILLING)
H-30 DRILLING INC 251 N Water Ste 10 Wichita KS 67202 316-263-2043
LEONARD HUDSON DRILLING CO PO Box 1876 Pampa TX 79065 806-665-1816
HUGHES DRILLING CO Box 6001 Enid OK 73702 405-234-7222
HUNNICUTT CAMP DRILLING CO PO Box 399 Rio Vista CA 94571 707-374-2425 805-327-3948
CLINT HURT & ASSOCIATES INC PO Box 1973 Midland TX 79702 915-683-6381
HUSKY DRILLING CO 555 N Woodlawn Ste 114 Wichita KS 67208 316-685-7677
HUTHNANCE DRILLING CO 601 Jefferson Houston TX 77002 713-659-4816
HYLTON DRILLING CO 7700 Downing Rd Bakersfield CA 93308 805-589-2062

I

INTERNATIONAL CHANDLERS 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
INTERNATIONAL PETROLEUM SERV CO Rte 6 N PO Box 547 Sheffield PA 16347 814-968-3295

J

JADE DRILLING LTD 5825 98th St Edmonton AB T6E 3L4 Canada 403-437-2930
J & C DRILLING CO PO Box 216 Refugio TX 78377 512-526-2376
J & W DRILLING CO Rte 3 Gorman TX 76454 817-734-2665
JAPAN DRILLING CO LTD No 11 Mori Bldg 6-4 Toranomon 2-chome Minato-ku Tokyo Japan 03-591-7391
JAY-LAN CORP 207 W 12th St Hays KS 67601 913-628-1316
JEBSENS DRILLING PLC Greenbank Rd East Tullos Aberdeen AB1 4BQ Scotland (0024) 878218 ext 25
JFP WELL SERVICE INC 14425 Torrey Chase Blvd Ste #300 Houston TX 77014 713-893-4464
J L OFFSHORE DRILLING INC 15915 Katy Fwy Ste 600 Houston TX 77218 713-492-2888
JOHNN DRILLING CO PO Box 6189 Odessa TX 79762 915-563-1280
JOHNSON-BATES DRILLING CO PO Box 128 Konawa OK 74849 405-925-3256
JOMAX DRILLING LTD 1700 505 Third St SW Calgary AB T2P 3A8 Canada 403-265-5312
JONES DRILLING CO PO Box 665 Albany TX 76430 915-762-3652
LOYD JONES DRILLING CO PO Box 816 Perryton TX 79070 806-435-6871
JONES DRILLING CORP PO Box 1185 Duncan OK 73533 405-255-1191
J 3 DRILLING CO 1720 600 Bldg Corpus Christi TX 78473 512-881-9773
JUSTISS OIL CO PO Drawer N Jena LA 71342 318-992-4111
J-V DRILLING CO 4445 Commerce St Evansville IN 47710 812-424-3571
J W DRILLING CO 200 E First St Ste 500 Wichita KS 67202 316-263-5924

K

KANDRILCO INC Bldg 1 Ste 207 555 N Woodlawn Wichita KS 67208 316-681-1623
KANSAS DRILLING & WELL SERV INC 203 S Third Marion KS 66861 316-382-3734
KAY DRILLING CO PO Box 1622 Ponca City OK 74602 405-765-2406
K B DRILLING & PRODUCTION INC PO Box 1244 Taft CA 93268 805-763-5106
K B DRILLING CO PO Box 1848 Harve MT 59501 406-265-1407
KCA DRILLING LTD KCA House 227 Sheperds Bush Rd London W6 7AS England 01-741-4811
KELLEY ONSHORE DRILLING CO 9207 Emmott Ste 105 Houston TX 77040 713-896-8142
K L KELLOGG & SONS 4220 Long Beach Blvd PO Box 7053 Long Beach CA 90807 213-422-1247
KENAI DRILLING LTD PO Box 6725 Odessa TX 79767 915-362-2323
KENDALL DRILLING CO 3112 E Powell Evansville IN 47715 812-477-5535
KENTING DRILLING CO LTD #1910 800-Fifth Ave SW Calgary AB T2P 2P9 Canada 403-298-5250
KENTING DRILLING CO LTD One Denver Place Ste 220 999-18th St Denver CO 80202 303-893-1383
KENTING DRILLING SERV LTD Trent Lane Castle Donington Derby DE7 2NP England (0332) 850060 Telex 377905
KEYDRIL CO 2000 Capital Bank Plaza 333 Clay St Houston TX 77002 713-754-3769
KEYES OFFSHORE INC 14141 SW Fwy Ste 5200 Sugarland TX 77487 713-491-2002
KING DRILLING CO Rte 1 Box 9 Canadian TX 79104 806-323-6664
KINGERY DRILLING CO PO Box 1588 Ardmore OK 73402 405-223-6823
KINGSNORTH MARINE DRILLING LTD 53 Leadenhall St London EC3A 2BR England 01-481-2020 (851) 884801

L

LADRIDO DRILLING CO 3610 W Wall Midland TX 79701 915-694-2546
LAGERSEN DRILLING CO 302 Beck Bldg Shreveport LA 71101 318-227-9939
L & G DRILLING CO PO Box 35 Mt Pleasant MI 48858 517-772-3083
LANDIS DRILLING CO One Marienfeld Place Ste 305 PO Box 3579 Midland TX 79702 915-683-4151
L & M DRILLING CO PO Box 470 Artesia NM 88210 505-748-2205
L & R DRILLING CO PO Box 936 Pierre SD 57501 605-224-8393

L (Cont'd)

LANEX DRILLING CO 4013 NW Expy Ste 610 Oklahoma City OK 73116 405-840-5022
LEROY LANGE DRILLING CO 1102 Montana Big Lake TX 76932 915-465-4751
LA RUE DRILLING CO PO Box 202 Artesia NM 88210
D R LAUCK OIL CO 221 S Broadway Ste 400 Wichita KS 67202 316-263-8267
LEBEN DRILLING CO 105 S Broadway Ste 640 Wichita KS 67202-4260 316-264-2375
LEE DRILLING INC 4802 Derrick Dr Abilene TX 79601 915-677-3566
LEEMAN DRILLING CO 1400 Fifty Penn Place Oklahoma City OK 73118 405-842-1622
LEMKCO DRILLING CO LTD 6767 Golden West Ave Red Deer AB T4P 1A7 Canada 403-342-4200
DAN LESTER DRILLING CO PO Drawer N Jefferson TX 75657 214-665-2511
LLL DRILLING CO PO Box 188 Bloomfield NM 87413 505-632-8045
LOFFLAND BROS CO PO Box 2847 Tulsa OK 74101 918-622-9330
LOGAN DRILLING CO PO Box 1622 Enid OK 73702 405-233-5048
LOHMANN DRILLING CO 13 NW 45th St Evansville IN 47708 812-428-4180
J ROY LOHMANN INC PO Box 8134 Evansville IN 47715 812-473-8044
LORD DRILLING CO 14618 W Sixth Ave Golden CO 80401 303-279-2471
LOUISE DRILLING CO PO Box 467 Louise TX 77455 409-648-2641
LOWE DRILLING CO PO Box 1368 Albany TX 76430 915-762-2530
LUKE GRACE CO 710 Petroleum Bldg PO Box 5371 Wichita Falls TX 76307 817-723-2187
LYNX DRILLING CO PO Box 13300 Arlington TX 76013 817-261-4181

M

MAERSK DRILLING Esplanaden 50 DK-1098 Copenhagen K Denmark 01-14 15 14 (855) 16201 MDrill DK
MAGEE-POOLE DRILLING CO PO Box 2000 Alice TX 78332 512-664-1891
MAGIC CIRCLE DRILLING CO 4141 Northwest Expwy Oklahoma City OK 73116 405-843-6654
MAGNUM MARINE CORP LP Tower Ste 200 PO Box 3579 Conroe TX 77305 409-539-5000 713-367-4000 (Houston) Telex 792749
R L MANNING CO 1700 Broadway Ste 2200 Denver CO 80290 303-839-1977
MAP DRILLING CO 416 Oil & Gas Bldg New Orleans LA 70112 504-524-6282
MARINE DRILLING CO 900 CCNB Center South Corpus Christi TX 78411 512-884-8651
MARINE DRILLING SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
MARION DRILLING & SERVICES CO PO Box 3027 Mobile AL 36652 205-626-3924
MARLIN DRILLING CO 1333 West Loop South Ste 780 Houston TX 77027-9178 713-627-1161
MARLIN-WEST DRILLING CO 3025 Gibson St PO Box 551 Bakersfield CA 93302 805-327-8304
MAXWELL HERRING DRILLING CORP PO Box 1297 Tyler TX 75710 214-593-1737
MAYRONNE CO Div Mayronne Enterprises Inc PO Box 432 Harvey LA 70059 504-366-7286
McALLISTER DRILLING INC 251 North Water Ste 10 Wichita KS 67202 316-263-6972
McBAY OIL & GAS INC PO Box 1085 Crockett TX 75835 409-544-5168
J W McCUTCHEN DRILLING CO 912 Oil & Gas Bldg Wichita Falls TX 76301 817-322-9231
McLENNAN DRILLING CO PO Box 6 Nowata OK 74048 918-273-1265
McMURREY PETROLEUM INC PO Box 1899 Kilgore TX 75662 214-984-3578
McVAY DRILLING CO 308 Philtower Bldg Tulsa OK 74103 505-397-3311
MEGARGEL DRILLING CO PO Box 356 Megargel TX 76370 817-563-2311
MELLON DRILLING CO 133 W Concho Ste 103 San Angelo TX 76903 915-655-8951
MELTON DRILLING CO 7101 Downing Ave Bakersfield CA 93308 805-587-0521
MENDENHALL DRILLING CO PO Box 6 Lamont OK 74643 405-388-4444
MERCURY DRILLING CO 1701 SE 25th St Oklahoma City OK 73129 405-672-4441
MESA DRILLERS PO Box 108 Lubbock TX 79408 806-794-3248
MESA DRILLING CO PO Box 1481 Abilene TX 79604 915-673-4787
MGF DRILLING CO-HOUSTON 2626 Richmond Ave Ste B Houston TX 77098 713-526-7236
MGF DRILLING CO-LAFAYETTE PO Box 938 Scott LA 70583 318-237-6161
MGF DRILLING CO-MIDLAND PO Box 6370 Midland TX 79701 915-563-4850
MID ATLANTIC OIL CO DRILLING DIV PO Box 198 Belle Valley OH 43717 614-732-5674
MILLER CONTRACT DRILLING INC PO Box 478 Livingston TN 38570 615-823-6425
MILLER EXPLORATION CORP PO Box 246 Allegan MI 49010 616-843-8331
GEORGE N MITCHELL DRILLING CO Airport Rd PO Drawer 111 Carmi IL 62821 618-382-2343
M N D DRILLING CORP-NORTHERN DIV PO Box 248 Bridgeport TX 76026 817-683-7922
M N D DRILLING CORP-SOUTHERN DIV PO Box 109 Magnolia TX 77355 713-356-8260
MOLEN DRILLING CO Grand Bldg Ste 500 PO Box 2222 Billings MT 59103 406-252-2591
MONTEREY DRILLING CO PO Drawer 30740 Santa Barbara CA 93130 805-327-3948
MONTGOMERY DRILLING CANADA LTD 960-700 Fourth Ave SW Calgary Alberta T2P 3J4 Canada 403-290-1644
MONTGOMERY DRILLING CO PO Box 2508 Bakersfield CA 93303 805-393-9620
MONTREAL ENGENHARIA S/A Rua Sao Jose 90/4 And Rio de Janeiro-RJ-Brazil 20013 (021) 224-8999
MORAN BROS INC PO Box 4502 Houston TX 77210 713-491-2941
MORANCO PO Box 1860 Hobbs NM 88240 505-397-3511
E W MORAN DRILLING CO PO Box 7519 Wichita Falls TX 76307 817-691-3000
MORCO A/S PO Box 65 N-4056 Tananger Norway 04-696766
MORRISON DRILLING & PRODUCING CO One Energy Square Ste 1-LB Abilene TX 79601 915-677-8523
MOSLEY WELL SERVICE INC PO Box 970 Minden LA 71055 318-949-4103
MOXA DRILLING CO 108 W Eighth McCook NE 69001 308-345-2945
MURCO DRILLING CORP 1900 Beck Bldg Shreveport LA 71101 318-221-7373
MURFIN DRILLING CO 250 N Water Ste 300 Wichita KS 67202 316-267-3241
MURLYNSON DRILLING CO PO Drawer 1876 Alice TX 78333 512-664-4540
PETE MURPHY DRILLING CO PO Drawer 1876 Alice TX 78333 512-664-3807

N

NABORS ALASKA DRILLING INC Anglo Energy Co 4300 B St Ste 600 Anchorage AK 99503 907-561-4440
NABORS DRILLING LTD 324 Eighth Ave SW 1107 Home Oil Tower Ste 1107 TD Square Calgary AB T2P 272 Canada 403-263-6610
NATIONAL DRILLING CO PO Box 4017 Abu Dhabi UAE 958-22553 FM NADRIL
NECK DRILLING CO Bin X Taft CA 93268 805-769-8811
NEDDRILL (NETHERLAND) BV PO Box 1925 3000 BX Rtdm Coolsingel 139 Rotterdam Netherlands 3012 AG 10-17-79-66
NELSON DRILLING & WELL SERV 2100 Louisiana Tower Shreveport LA 71101 318-221-6890
DAVID NEW DRILLING CO PO Drawer 1487 Natchez MS 39120 601-442-1607
NEW JERSEY DRILLING CO Rte 206 Box 6 Netcong NJ 07857 201-347-2269
NEW PROSPECT DRILLING CO PO Box 729 Greenwood AR 72936 501-996-6791
NICKLOS DRILLING CO PO Box 752 Eunice LA 70535 318-457-8103
NICKLOS DRILLING CO 5200 Interfirst Plaza Houston TX 77022 713-658-8245
NICOR DRILLING CO 500 Reunion Center 9 E Fourth St Tulsa OK 74103 918-587-5507
NIXON DRILLING CO 201 S Laurel St PO Box 632 Luling TX 78648 512-875-2416
NL WELL SERVICE PO Box 488 Abbeville LA 70510 318-893-3486
NOBLE DRILLING CORP 1924 S Utica Ste 600 Tulsa OK 74104 918-749-9901
NORDRILL INTERNATIONAL INC 7670 Woodway Ste 150 Houston TX 77063 713-974-0000
JAMES R NORMAN DRILLING CO Rte 3 Box 391 Dickson TN 37055 615-645-4361
NORTON DRILLING CO 606 Republic Bank Bldg Lubbock TX 79401 806-747-3324
A N NORWOOD INC PO Box 310 Midland TX 79702 915-683-3972
NOWOTNY & CONLEY DRILLING CORP 1700 Buckner Square Ste 200 Shreveport LA 71101 318-227-0442
N R G DRILLING INC PO Box 1157 Liberal KS 67901 316-624-1818

O

OCEAN DRILLING & EXPL CO PO Box 61780 New Orleans LA 70161 504-561-2811
OCEAN DRILLING SERVICES INC 1901 N Akard Dallas TX 75201 214-653-8700
ODEBRECHT PERFURACOES LTDA Rua da Gloria 290 - 10th CEP 20241-Rio de Janeiro RJ-Brazil (021) 221-0860 (391) 792225 Odei BR (391) 02133197 Odei BR
ODFJELL DRILLING & CONSULTING CO A/S Kokstadflaten 5 PO Box 33 N-5061 Kokstad Norway 05-22 77 80 Telex: 42634 odccn/40507 odbas (856)
OIL DRILLING & EXPL LTD Level 36 AMP Centre 50 Bridge S Sydney NSW 2000 Australia 232-2066
ELMER OELZE JR RR 1 Box 148 Nashville IL 62263 618-327-3807
OLSEN DRILLING CO One Denver Place Ste 3300 999-18th St Denver CO 80202 303-292-9930
O'NEAL DRILLING CO PO Box 4660 Fort Worth TX 76106 817-625-8246
ONEOK DRILLING CO 7060 S Yale Tulsa OK 74153 918-494-8725
ORIGINALA DRILLING CO 956 S Main Jacksboro TX 76056 817-567-3991
ORKUSTOFNUN STATE DRILLING CONTRS Grensasveg 9 108 Reykjavik Iceland
OWEN DRILLING CO PO Box 861 Magnolia AR 71753 501-234-6300
JACK OWENS SERV CO 1626 Del Dayo Dr Carmichael CA 95608 916-485-8995

P

PACNORSE DRILLING SA PO Box 140 Orange CA 92668 714-567-8215
PADRE DRILLING CO PO Box 9925 Corpus Christi TX 78469 512-241-2871
PAN ARCTIC DRILLING PO Box 487 Nisku AB T0C 2G0 Canada 403-955-7944
PAR-CO DRILLING INC PO Box 873 Natchez MS 39120 601-442-6421
PARKER DRILLING CO 8 E Third St Tulsa OK 74103 918-585-8221
PEARL EXPLORATION INC PO Box 2179 Alice TX 78332 512-664-2605
PENROD DRILLING CO 2200 Thanksgiving Tower Dallas TX 75202 214-880-1700
PETERS DRILLING INC PO Box 742 Great Bend KS 67530 316-793-6721
P E P DRILLING CO 123 S Tenth PO Box 824 Mt Vernon IL 62864 618-242-2205
PHELPS DRILLING INTERNATIONAL LTD #800 11012 Macleod Trail S Calgary AB T2J 6A5 Canada 403-278-6050
PHOENIX MANAGEMENT CORP 2925 Briarpark Ste 500 Houston TX 77042 713-784-2420
PICKRELL DRILLING CO 110 N Market Ste 205 Wichita KS 67202 316-262-8427
PLOTNER DRILLING CO 8101 NW 10th St Oklahoma City OK 73127 405-787-7234
PNOC ENERGY DRILLING INC Philippine National Oil Co Merritt Rd Ft Bonifacio Metro Manila Philippines 815-89-61
POOL ARABIA LTD PO Box 4271 Houston TX 77210 713-780-4999
POOL AUSTRALIA INC PO Box 4271 Houston TX 77210 713-780-4999
POOL INTAIRDRIL PO Box 4271 Houston TX 77210 713-780-4999
POOL OFFSHORE PO Box 4271 Houston TX 77210 713-780-4999
POOL OFFSHORE SERVICE 298 Prospect St PO Box 2166 Houma LA 70361 504-868-1430
POOL SANTANA LTD PO Box 4271 Houston TX 77210 713-780-4999
GENE PORTER DRILLING CO PO Box 389 Cushing OK 74023 918-225-1563
POWER RIG DRILLING CO PO Box 52808 Lafayette LA 70505 318-234-4525
POZOS INTERNATIONAL DRILLING SERVICES CO 9 Pozos Lane PO Box 3339 Conroe TX 77305 409-756-4161
PRC DRILLING CO PO Box 1121 Corpus Christi TX 78403 512-289-6763
PRECISION DRILLING LTD Ste 1010 500 Fourth Ave SW Calgary AB T2P 2V6 Canada 403-264-4882
PRECISION EXPL CO PO Box 278 Olney IL 62450 618-395-8448
PREUSSAG AKTIENGESELLSCHAFT Erdol und Erdgas PO Box 1628 3150 Peine West Germany (05176)-171
J A PRICE & CO PO Box 4435 Odessa TX 79760 915-563-3139
T D PROVINS DRILLING CO 2113 Enterprise Dr PO Box 668 Mt Pleasant MI 48858 517-773-6946
PRUET-RAM CO PO Box 31 El Dorado AR 71730 501-863-3612
PT MAFHABOR INDONESIA J1 IR H JUANDA III/7-9 Jakarta Indonesia
PT META EPSI PRIBUMI DRILLING CO JL Madiun No 12 JKT 10310 PO Box 4311 JKT 10001 Indonesia 348900
PYRAMID OIL WELL SERV PO Box 3225 Santa Fe Springs CA 90670 213-944-6703

Q

QUANZA DRILLING INC 3824 N Meridian Ste 110 Oklahoma City OK 73112 405-942-7800
QUARLES DRILLING CORP 1503 Engineers Rd Belle Chasse LA 70037 504-392-4191
QUARLES DRILLING CORP 7633 E 63 Place Suite 500 Tulsa OK 74133 918-250-0515
QUITRAL-CO S.A.I.C. Cerrito 822 9o Piso Buenos Aires Argentina 1010 40-8310

R

RAINBOW DRILLING CO 1108 N Kilgore St PO Box 1779 Kilgore TX 75662 214-984-5095
RAINS & WILLIAMSON OIL CO 435 Page Court 220 W Douglas Wichita KS 67202 316-265-9686 913-735-2215 913-625-7976
RAM DRILLING CO PO Box 118 Browns IL 62818 618-446-5117
R & G DRILLING Sub Rine Drlg 300 W Douglas Ste 600 Wichita KS 67202 316-267-1333
RANGE DRILLING CO 240 Page Ct 220 W Douglas Wichita KS 67202 316-265-6231
RAPAD DRILLING CO (See CHESLEY PRUET DRILLING CO)
RATLIFF DRILLING CO PO Box 988 Duncan OK 73533 405-255-2916
RAY RESOURCES CORP PO Box 203 Culloden WV 25510 304-743-9067
READING & BATES DRILLING CO 901 Threadneedle Ste 200 PO Box 79627 Houston TX 77279 713-496-5000
REBEL RIG #3 LTD PO Box 1151 Natchez MS 39120 601-446-7831
REBSTOCK DRILLING CO 2601 Lexington Ave Kenner LA 70062 504-467-1321
RED ARROW DRILLING LTD 520 304 Eighth Ave SW Calgary AB T2P 1C2 Canada 403-264-0695
RED TIGER DRILLING CO 1720 Kansas State Bank Bldg Wichita KS 76202 316-263-2371
REGENT DRILLING LTD 12540 129th St Edmonton AB T5L 4W5 Canada 403-455-2121
REMCO DRILLING 3000 E Hwy 80 Haughton LA 71037 318-949-4103
REPUBLIC DRILLING CO PO Box 2945 Santa Fe Springs CA 90670 213-595-4505
RESOURCE DRILLING INC PO Box 4341 Houston TX 77210 713-932-1100
RICHARDS-ARMSTRONG INC PO Box 1149 Bay City TX 77414 409-245-8389
RICHARDS DRILLING CO PO Box 1149 Bay City TX 77414 409-245-8389
RICHARDS DRILLING CO ASSOC PO Box 1149 Bay City TX 77414 409-245-8389
RICHTER DRILLING PTY LTD 14 Cribb St Milton Vacc Bldg 1st Floor GPO Box 2197 Brisbane Queensland 4000 Australia (07) 369-8255 (07) 229-2544
RILEY DRILLING CO 907 Scurry Big Spring TX 79720 915-394-4454
RINE DRILLING CO 300 W Douglas Ste 600 Wichita KS 67202 316-267-1333
RIO COLORADO DRILLING CO PO Drawer 8243 Midland TX 79708 915-561-9901
RIO COLORADO SA Sarmiento 663 7th Floor 1316 Buenos Aires Argentina (390) 18930
RIO GRANDE DRILLING CO 2300 Tower Life Bldg San Antonio TX 78205 512-224-4572
ROBERSON DRILLING CO PO Box 1966 Ardmore OK 73402-1966 405-223-1277
ROBINSON DRILLING OF TEXAS PO Box 311 Big Spring TX 79720 915-267-5277
ROCKHOLD ENGINEERING INC PO Box 698 Great Bend KS 67530 316-792-2506
ROCKWELL DRILLING CO PO Box 993 400 W Fifth St Holdenville OK 74848 405-379-5414
ROCKY MOUNTAIN DRILLING LTD 10333 Southport Rd SW #415 Calgary AB T2W 3X6 Canada 403-259-6767
ROD RIC CORP PO Box 10847 Midland TX 79702 915-682-7880
MIKE ROGERS DRILLING CO PO Box 126 Magnolia AR 71753 501-234-2322
ROSAMOND DRILLING CO 1300 Main Ste 1800 Houston TX 77002 713-951-9155
ROSS DRILLING CO PO Box 2008 3201 Sandefjord Norway 34-63481
ROWAN COMPANIES INC-US 5051 Westheimer 1900 Post Oak Tower Houston TX 77056 713-621-7800
ROWAN DRILLING-US 1900 Post Oak Tower Bldg 5051 Westheimer Houston TX 77056 713-621-7800
ROWAN INTERNATIONAL INC 5051 Westheimer 1900 Post Oak Tower Houston TX 77056 713-621-7800
ROYAL DRILLING INC PO Box 1971 Ada OK 74820 405-332-1426
R R A INC 510 Hardage Center Wichita KS 67202 316-262-3411
R RIGS INC PO Box 99 Quinlan TX 75474 214-563-6771
R W I T DRILLING CO 324 W Main PO Box 551 Holdenville OK 74848 405-379-5491

S

SABRE DRILLING INC 1215 24th St W #140 Billings MT 59102 406-656-0730
GRACE SABRE DRILLING 3300 NE 60th Oklahoma City OK 73121 405-478-1757
SAFARI DRILLING CORP PO Box 3236 Abilene TX 79604 915-677-2826
SAGE DRILLING CO 202 S St Francis Wichita KS 67202 316-263-6139
SAIPEM SPA PO Box 12072 San Donato Milanese 20097 Milano Italy 02 5201 (02) 520-9953
SALEN OFFSHORE CO 580 Westlake Park Blvd Ste 600 Houston TX 70079 713-496-7770
SANDERS DRILLING CO PO Box 1086 New Iberia LA 70560 318-364-1537
SANDIA DRILLING CO 2500 Broadway Bldg Edmond OK 73034 405-340-4500
S & T DRILLING LTD PO Box 4890 Edmonton Alberta T6E 5G7 Canada 403-955-7011
SAN PATRICIO CORP PO Box 966 Corpus Christi TX 78403 512-289-6717
SANTA FE DRILLING CO 505 S Main St PO Box 1401 Orange CA 92668 714-558-1300 714-567-8000
SAVAGE DRILLING INC 9525 Katy Fwy #309 Houston TX 77024 713-932-7299
SAWYER DRILLING & SERV INC 1300 American Tower Shreveport LA 71101 318-949-3282
SCANDINAVIAN MONTGOMERY DRILLING PO Box 2508 Bakersfield CA 93303 805-393-9620
SCHLENSKER DRILLING CORP PO Box 831330 Richardson TX 75083-1330 214-231-8551
DON SCOTT DRILLING CO PO Box 177 Jonesville MI 49250 517-849-9237
JERRY SCOTT DRILLING CO 319 N Harvey Rd PO Box 1468 Seminole OK 74868 405-382-2202
SEA DRILLING NETHERLANDS 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
SEALY & CO PO Box 407 Breckenridge TX 76024 817-559-6543

S (Cont'd)

SEDCO DRILLING Box 6620 Postal Sta D 1700 321 Sixth Ave SW Calgary AB T2P 3R3 Canada 403-231-1161
SEDCO INC Middle East Land Rigs 1901 N Akard Dallas TX 75201 214-720-8700
SEDCO INTERNATIONAL SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-643-8700
SEDCO MARITIME INC 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
SEDCO-UNDERSEAS DRILLING LTD 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
SENECA DRILLING CO 100 NW 63rd St Oklahoma City OK 73116 405-848-3388
SENIOR DRILLING CO 7557 Rambler Rd Ste 750 Dallas TX 75231 214-373-3311
SERVICE DRILLING CO PO Box 5320 Borger TX 79007-5320 806-273-7573
SERVICE EQUIPMENT & ENGINEERING INC 900 Dunn St Houma LA 70360 504-868-9010
SH & J DRILLING CORP PO Drawer 888 Magnolia AR 71753 501-234-4600
DEAN SHANK DRILLING CO 2908 Engineers Rd Belle Chasse LA 70037 504-392-1685
SHARP DRILLING CO PO Box 1271 Midland TX 79702 915-683-3384
SHELBY DRILLING 5350 S Roslyn Ste 300 Englewood CO 80111 303-740-2200
SHELBY DRILLING LTD 4A 2016-25th Ave NE Calgary AB T2E 6Z4 Canada 403-230-3655
R H SHELDON & SON INC 13213 TR 50 Dunkirk OH 45836 419-759-2351
SHIELDS DRILLING CO PO Box 709 Russell KS 67665 913-483-3141
SHULER DRILLING CO 3514 W Hillsboro El Dorado AR 71730 501-863-7234
SIERRA DRILLING CO PO Box 2681 Midland TX 75231 214-363-7163
SIMMONS DRILLING INC 7000 S Potomac Englewood CO 80112 303-799-0161
SIMMONS DRILLING LTD 600-1177 11th Ave SW Calgary AB T2R 1K9 Canada 403-244-5340
SITTON DRILLING CO 916 Main Ste 503 Lubbock TX 79401 806-763-4442
SKINNER MARINE OPERATIONS LTD PO Box 46 San Fernando Trinidad West Indies 65-77265
SLAWSON DRILLING CO 200 Douglas Bldg Wichita KS 67207 316-263-3201
SLOAN DRILLING CO 2761 E Skelly Dr 2700 Center Bldg Tulsa OK 74105 918-745-6570
A/S SMEDVIG DRILLING CO PO Box 110 4001 Stavanger Norway (04) 5-20040
SMITH DRILLING CO Rte 1 S PO Box 150 Lawrenceville IL 62439 618-943-2342
CARL E SMITH PETROLEUM INC PO Box 4 Sandyville WV 25275-0004 304-273-9313
SNYDER DRILLING WELL SERV CO Hwy 1 S PO Box E Grayville IL 62844 618-375-2491
SOAPE DRILLING CO PO Box 1284 Billings MT 59103 406-252-1341
SOJOURNER DRILLING CORP PO Box 3234 Abilene TX 79604 915-672-2832 915-677 6269
SONAT INTEROCEAN DRILLING SA PO Box 2765 Houston TX 77252-2765 713-871-7500
SONAT OFFSHORE DRILLING INC PO Box 2765 Houston TX 77252-2765 713-871-7500
SONPETROL Orense, 32 Madrid 128020 Spain 455.18.58/62/66
SOUTHEASTERN DRILLING SERVICE INC 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
SOUTHEASTERN OCEAN DRILLING CO SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
SOUTHLAND DRILLING CO Rte 5 Box 121 Victoria TX 77901 512-578-3531
SOUTH SEAS DRILLING CO PO Box 1401 Orange CA 92668 714-558-1300
SOUTH TEXAS DRILLING CO 2211 NE Loop 410 Ste 100 San Antonio TX 78205 512-654-4085 713-784-4051
SPARTAN DRILLING INC 8223 Willow Place South Ste #135 Houston TX 77070 713-955-0625
SPARTAN DRILLING LTD 1800 801 Sixth Ave SW Calgary AB T2P 3W2 Canada 403-262-7778
STAHLCO DRILLING CO 1013 W Eighth PO Box 2231 Amarillo TX 79105 806-376-5038
STERLING DRILLING CO 230 N Fourth St Sterling KS 67579 316-278-2131
STERLING DRILLING CO PO Drawer 3068 Midland TX 79702 915-685-3054
STEWART BROTHERS DRILLING CO PO Box 2067 Grants NM 87020 505-287-2986
STOEPPELWERTH DRILLING INC 1111 E "H" St McCook NE 69001 308-345-1766
STRATA DRILLING INC PO Box 355 Great Bend KS 67530 316-793-7971
STRIKE DRILLING CORP 5525 MacArthur Blvd Ste 520 Box 47 Irving TX 75062 214-659-9254
SUMPTER & BARKER DRILLING CO PO Box 1081 Stillwater OK 74076 405-372-4063
SWEETMAN DRILLING INC 500 Heritage Park Place Wichita KS 67202 316-265-5561

T

TAHOE DRILLING CO 4402 W Industrial Midland TX 79703 915-697-4173
TAYLOR DRILLING CO PO Box 597 Chehalis WA 98532 206-748-3445
T E K DRILLING CO 1224 Josey Lane Ste B Carrollton TX 75006 214-242-8314, 6402
TELEDYNE MOVIBLE OFFSHORE INC PO Box 31936 Lafayette LA 70505 318-365-6681
TEMPLE DRILLING CO 3300 Capital Bank Plaza Houston TX 77002 713-759-0960
TESORO DRILLING CO PO Drawer 2909 Laurel MS 39440 601-425-1481
TEXAS DRILLING CO PO Box 240 Abilene TX 79604 915-673-5024
TEXZONA DRILLING CORP 21 Windmill Circle PO Box 6127 Abilene TX 79608 915-695-4963
THEISS DRILLING CO 4726 Jacksboro Hwy Wichita Falls TX 76302
THOMAS DRILLING CO PO Box 400 Duncan OK 73533 405-252-5580
THOMPSON DRILLING CO 4 Corporate Dr Ste 102 Newport Beach CA 92660-7988 714-644-9292
THUNDERBOLT DRILLING INC PO Box 129 Winnsboro TX 75494 214-342-5221
TMBR DRILLING INC PO Drawer 10970 Midland TX 79702 915-563-1927
TOLTEK DRILLING CO 340 Denver Club Bldg Denver CO 80202 303-571-1331
TOMMY'S OILWELL DRILLING INC PO Box 899 Graham TX 76046 817-549-6960
TOP DRILLING INC 2601 NW Expy Ste 101E Oil Center Oklahoma City OK 73112-7138 405-848-4414
TOWER DRILLING CO 14 Inverness Dr East Bldg H Suite 228 Englewood CO 80112 303-790-2222
TRANSCONTINENTAL DRILLING INC JACKSON DIV 1700 Capital Towers Jackson MS 39201 601-355-1542

T (Cont'd)

TRANSCONTINENTAL DRILLING INC MAGNOLIA DIV Magnolia AR 71753 501-234-5011
TRANSCONTINENTAL DRILLING INC SAN ANGELO DIV 3184 Executive Dr San Angelo TX 76903 915-653-3324
TRANSOCEAN DRILLING CO LTD PO Box 25861 Oklahoma City OK 73125 405-270-2804
TRANSWORLD DRILLING CO PO Box 25861 Oklahoma City OK 73125 405-270-2804
TRIAD DRILLING Sub UGI Development Co Grand Centre Bldg Ste 310 5400 N Grand Blvd Oklahoma City OK 73112 405-948-6006
TRIANGLE DRILLING LTD Rua da Gloria 290 - 10 20241 Rio de Janeiro - RJ Brazil (021) 221-0860 Telex (391) 021 33197 ODEI BR
TRI-CITY DRILLING LTD 14305 120th Ave Edmonton AB T5L 2R8 Canada 403-453-3771
TRIGG DRILLING CO PO Box 18605 Oklahoma City OK 73154 405-528-4456
TRI-LAND DRILLING CO PO Box 18605 Oklahoma City OK 73154 405-528-1463
TRI-SERVICE DRILLING CO 1200 Petroleum Bldg Midland TX 79701 915-684-6641
TROPIC SHIPPING ENTERPRISES LTD 17150 Butte Creek Rd Ste 100 Houston TX 77090 713-444-3970
TRUE DRILLING CO PO Drawer 2360 Casper WY 82602 307-237-9301
TUCKER DRILLING CO PO Box 1876 San Angelo TX 76901 915-655-6773
TWIN ARROW INC Box 948 Rangely CO 81648 303-675-8226
TWO R DRILLING CO PO Box 1968 Houma LA 70361 504-876-6987
TWT EXPLORATION INC PO Box 1329 Park City UT 84060 801-649-8212

U

UNDERWATER GAS DEVELOPERS LTD 3786 Hwy #3 RR #1 Sherkston Ontario L0S 1R0 Canada 416-894-1731
UNDERWOOD OIL WELL SERV INC Ouachita National Bank Bldg Ste 808 Monroe LA 71201 318-388-0385
UNION DRILLING INC PO Drawer 40 Buckhannon WV 26201 304-472-4610
UNIT DRILLING & EXPL CO 1100 Petroleum Club Bldg Tulsa OK 74119 918-582-3188
U R C DRILLING CORP 4141 Northwest Expy Oklahoma City OK 73116 405-842-1039

V

VAUGHN GOOD DRILLING INC PO Box 3744 Enid OK 73702 405-233-3899
VECO DRILLING INC 2457 Industrial Blvd PO Box 1705 Grand Junction CO 81501 303-242-6912
VENTURE DRILLING CO 848 E Main PO Box 1353 Cushing OK 74023 918-225-3269
VERNA CORP PO Box 952 Odessa TX 79760 915-381-6910
VIERSEN & COCHRAN DRILLING CO PO Box 19227 Oklahoma City OK 73144 405-681-6611
VI-ROI DRILLING CO PO Box 1624 Duncan OK 73533 405-255-9750
HERMANN VON RAUTENKRANZ INTERNATIONALE KG ITAG PO Box 114 D-3100 Celle Germany 841-925-241 ITAGCD

W

WARREN INTERSTATE DRILLING CO 906 Utica Tower Tulsa OK 74104 918-749-8361
WARRIOR DRILLING CORP 5801 N Broadway Ste 200 Oklahoma City OK 73118 405-840-3902
WEAL DRILLING CO PO Box 249 Hanson KY 42413-0249 502-322-3302
W E K DRILLING CO PO Box 1498 Roswell NM 88201 505-623-5070
WELL SERVICES LTD PO Box 152 San Fernando Trinidad West Indies 649-7531
W E S CORP PO Box 1329 Park City UT 84060 801-649-8212
WES-MOR DRILLING INC PO Box 1269 Graham TX 76046 817-549-3383
WESTBURNE DRILLING CANADA LTD 100 535 Seventh Ave SW Calgary AB T2P 0Y4 Canada 403-233-6600
WESTBURNE DRILLING INC 999-18th St #1860 PO Box 13079 Denver CO 80201 303-298-8800
WESTERN OCEANIC INC 515 S Post Oak Rd PO Box 56006 (77256) Houston TX 77027 713-629-2726
WESTERN OFFSHORE DRILLING & EXPLORATION CO 3333 Michelson Dr Irvine CA 92730 714-975-7034
WESTERN WELL DRILLING INC 11299 Brighton Rd Henderson CO 80640 303-288-2247
WES-TEX DRILLING CO PO Box 3739 Abilene TX 79604 915-677-9121
WESTWOOD DRILLING CO PO Box 5129 Woodward OK 73803 405-254-5940
WHEATSTATE OILFIELD SERVICES INC PO Box 329 Pratt KS 67124 316-672-7514
WHELESS DRILLING CO 920 Commercial National Bank Bldg Shreveport LA 71101 318-222-3137
WHITE & ELLIS DRILLING INC 401 E Douglas Ste 500 Wichita KS 67202 316-263-1102
E E WHITEHEAD DRILLING CONTR PO Box 1255 Drumright OK 74030 918-352-2230
WILCOX DRILLERS INC PO Box F F Natchez MS 39120 601-446-5021
WILH WILHELMSEN Roald Amundsens Gate 5 Oslo 1 Norway Telex 78900
WILLBROS DRILLING INC FM 1788-2 mi S I-20 PO Box 833 Rte 6 Midland TX 79701 915-563-0221
WILLIAMS DRILLING CO 1300 Main St Ste 1530 Houston TX 77002 713-652-9106
WILLIAMS DRILLING CO OF SOUTH TEXAS PO Drawer 3050 Alice TX 78333 512-668-9867
WILLIS DRILLING CO PO Box 479 Edinburg TX 78540 512-383-3888
WILSON BROS DRILLING CO 217 E Kaliste Saloom Rd PO Drawer 53628 Lafayette LA 70505 318-233-5950
LES WILSON INC PO Box 331 Carmi IL 62821 618-382-4666
WOOLF & MAGEE INC PO Box 6566 Tyler TX 75711 214-561-4051
W W CORP 220 N Main St Madisonville KY 42431 502-821-0087
WYOMING WELL SERV INC PO Box 340 Cody WY 82414 307-587-4249

Y

YOUNG DRILLING CO Bloomfield Hwy PO Box 717 Farmington NM 87401 505-327-5218

Z

ZAPATA OFFSHORE CO Zapata Tower PO Box 4240 Houston TX 77210-4240 713-226-6501
ZENITH DRILLING CORP Fourth Financial Center Ste 505 Wichita KS 67202 316-265-6697

Petroleum Engineer® INTERNATIONAL

US Contract Rotary Land Drilling Rigs

ALABAMA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Chesley Pruet Drlg	14	dsl	3600	G-D 1500M	3600	25
Culver Drlg	20	dsl	2000	Nat 1320	2000	25
Justiss Oil	11	dsl	1200	Emsco GB800	1600	14
BALDWIN						
Underwood Oil Well Serv	12	dsl	350	S/B N3	350	4
CHOCTAW						
Marion Drlg	7	dsl	2400	Emsco C1	2400	20
ESCAMBIA						
Bay Drlg	2	dsl	2500	Nat 110M	2500	20
Dual Drlg	22	dsl	2700	Nat 1320M	2000	28
Exeter Drlg Southern	15	dsl	2550	G-D 1100	1550	18
Murco Drlg	14	d-s	3200	G-D 1500	2800	25
	18	dsl	2800	MC U1220	2400	25
Penrod Drlg	19	dsl	2600	Nat 1320M	3425	25
Wilson Bros Drlg	2	dsl	1900	Nat 110	1900	20
FAYETTE						
Lohmann Drlg	9	dsl	300	Nat T12	300	3.5
GREENE						
Resource Drlg	RD10	dsl	2330	Nat 110	2740	18
HALE						
Crescent Drlg	7	dsl	1750	Beth Toro	2000	13
LAMAR						
Apollo Drlg Inc (TX)	1	dsl	500	Nat 370	550	10.5
	5	dsl	500	Nat 370	550	10.5
Lohmann Drlg	8	dsl	300	Nat 32	550	7.5
MOBILE						
Exeter Drlg Southern	27	dsl	2800	G-D 1500	2800	25
Marion Drlg	8	d-e	2400	Emsco C1	2400	20
Noble Drlg	25	el	3300	Nat 1625DE	3135	30
Penrod Drlg	6	dsl	3425	Nat 1625M6	2200	30
	7	dsl	3425	Nat 1625M6	2200	30
	9	dsl	2600	Nat 1320M	3425	25
Resource Drlg	RD-22	dsl	3105	Nat 1320	3740	25
MONROE						
Delta Drlg	66	d-e	2600	Emsco Electrohoist II	3456	18
Tesoro Drlg	5	dsl	2000	Nat 80B	1650	15
PICKENS						
Lohmann Drlg	5	dsl	600	Nat 50A	600	10

ALASKA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ANCHORAGE						
Nabors Alaska Drlg	28-E	d-e	2000	Emsco Electrohoist IIC	3700	25
KENAI						
Brinkerhoff-Signal	31	dsl	800	Nat T20	300	6.5
	36	dsl	4000	Nat 110	1800	16
	43	dsl	3600	Olwl 96	1800	16
	54	dsl	3600	Nat 110UE	1800	16
	58	dsl	2000	Wils 120	1200	16
	59	dsl	3600	Olwl 96	1800	16
Rowan Drlg	29	dsl	1850	Nat 110	2400	20
NORTH SLOPE						
Alaska United Drlg	WWS-1	d-e	1000	Olwl 700E	700	10
	1	d-e	2000	Olwl 840E	1500	18
	2	d-e	3200	Olwl 2000	2000	20
	3	d-e	3200	Olwl 2000E	2000	20
Brinkerhoff-Signal	PNJVI	dsl	4000	Olwl E2000	2000	180
	84	dsl	4000	Nat 110	2000	16
Nabors Alaska Drlg	17	dsl	2000	Olwl 860	2475	19
	25	dsl	2000	Nat 110	2475	20
	1-ES	d-e	500	Emsco Electrohoist CII	2400	20
	18-E	d-e	2000	Emsco Electrohoist	3200	25
	22-E	d-e	3200	Emsco IIC Electrohoist	3200	25

ALASKA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
NORTH SLOPE (Cont'd)						
Nabors Alaska Drlg	26-E	d-e	3200	Emsco Electrohoist	4000	25
	27-E	d-e	3200	Emsco Electrohoist	4000	25
Parker Drlg	95	dsl	2600	Nat 130	3000	18
	96	dsl	2600	Nat 130	3000	20
	97	dsl	1400	Nat 80B	1400	15
	122	dsl	1800	OIME SL1500	1800	18
	123	dsl	1800	OIME SL1500	1800	18
	128	dsl	1400	OIME TBA2000	1400	15
	141	dsl	2700	OIME E2000	3000	18
	147	dsl	1400	OIME TBA2000	1400	15
	176	d-e	3200	OIME 2000E	2000	20
	191	dsl	3200	OIME 3000E	3000	20
Rowan Drlg	26	dsl	2000	Nat 110	1590	18
	33	d-e	1600	Nat 1320UE		20
	34	d-e	2000	Nat 110EH Special	3000	17
	35	d-e	2000	Nat 110EH Special	3000	17
	41	dsl	3200	Nat 1320UE	3300	25

ARIZONA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
NAVAJO						
Antelope Drlg	1	dsl	600	Cbot Comet 50	500	6.5

ARKANSAS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Justiss Oil	9	dsl	800	Emsco GC500	1200	12.5
	21	dsl	800	Emsco GB500	1000	12
SH & J Drlg	2	g-b	885	S/B N7	750	9.5
Transcontinental Drlg-Magnolia	4	gas	700	Emsco GB500	700	9.5
	7	dsl	1020	Olwl 76	1020	12.5
	54	dsl	800	Nat 50A	980	10
	56					
	94					
Unit Drlg & Expl	6	dsl	600	MC U15	800	11
COLUMBIA						
Noble Drlg	N-59	dsl	800	Nat 55	800	12
Rogers Drlg	1	dsl	550	S-H 7000	650	9.3
Sawyer Drlg & Serv	6	gas	1200	S/B N75	1200	13
Shuler Drlg	9	dsl	475	S-H 7000	750	7
CONWAY						
Grace Miller Drlg	108	gas		MC U15	450	8.5
	120	gas		S-H 7000	390	8
CRAWFORD						
Grace Miller Drlg	121	gas		S-H 7000	390	8
JOHNSON						
Dual Drlg	6	dsl	600	Emsco GB350	560	7.5
Grace Miller Drlg	105	gas		S-H 7000	390	8
	115	dsl		S-H 7000	600	8
New Prospect Drlg	1	dsl	950	S/B N46	950	12
LAFAYETTE						
Owen Drlg	7	dsl	1100	Idco H35	504	7
	8	dsl	300	Wils Super38	220	3.5
Shuler Drlg	6	dsl	950	Wils SG	950	10.5
SH & J Drlg	3	dsl	807	Unit 34	350	7.3
Transcontinental Drlg-Magnolia	22	dsl	750	S/B N7	750	11
LINCOLN						
Sawyer Drlg & Serv	15	dsl	800	MC U40D	800	14
LOGAN						
C E C Drlg	4	dsl	1400	G-D 500	800	12
FWA Drlg	6	dsl	900	Wils 75	720	10
Grace Miller Drlg	102	gas		MC U15	1080	12
	103	gas		Nat 50	500	10
	119	dsl		BDW 650	800	12
MAGNOLIA						
Excell Drlg	3	dsl	400	Fail 100	400	5.5

ARKANSAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
OUACHITA						
Hatcher & Son, H F	3	dsl	425	Wils Mogul 42	350	5
Shuler Drlg	7	dsl	380	S-H 6000	570	6
POPE						
Alexander Drlg	4	dsl	450	W-N 250H40	425	7
C E C Drlg	1	dsl	1100	MC U15	800	10
Dual Drlg	8	dsl	1250	Wils 75	750	9.5
FWA Drlg	31	dsl	1000	Wils Mogul 42	750	7.5
Grace Miller Drlg	107	gas		MC U15	400	8.5
	111	gas		S-H 7000	390	8
Ladrido Drlg	2	dsl	1000	MC U15	1050	12
	3	dsl	1350	MC U15	1050	12
SCOTT						
Henley Drlg	3	dsl	4000	S/B N12A	2700	25
	4	dsl	4000	Emsco C2	2000	25
SEBASTIAN						
Astro Drlg	19	dsl	912	Wils Super Giant	912	12.5
	20	dsl	550	Cbot 550	456	8.5
	22	dsl	920	Beth M58	920	12
	23	dsl	1050	Cbot 2550	1040	15
	48					
C E C Drlg	3	dsl	1200	G-D 500	800	12
Grace Miller Drlg	104	gas		Nat 50	520	8
	106	dsl		Beth 650	1000	13
	109	dsl		BDW 800	1290	15
	110	dsl		OIME SL1500	1500	18
UNION						
Shuler Drlg	1	dsl	325	S/B N4	350	5
	8	dsl	475	S-H 7000	540	7

CALIFORNIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Atlantic Oil	16	dsl	1650	Nat 130	2475	20
Cal Pacific Drlg	1	d-e	1200	Sup 700UE	700	10
	2	d-e	1200	Sup 700UE	700	10
	4	d-e	1950	Sup 1000UE	1000	12.5
	5	d-e	1950	Sup 1000UE	1000	12.5
	6	d-e	1950	Sup 1000UE	1000	12.5
	8	d-e	2000	Emsco C1Type2	1500	16
California Prod Serv	D-3	dsl	300	Idco H37D	461	4.5
	D-4	dsl	500	Hoop MTA	461	4.5
	D-7	dsl	1000	Hoop MTA	654	6.5
Cardinal Drlg	27	dsl	1200	Emsco GC500	1200	12.5
	29	dsl	800	Emsco GA500	1200	10
Gary Drlg	D-2	dsl	800	Nat T45	600	9
	D-3	dsl	628	Emsco G350	600	8
	D-11	dsl	600	Emsco C50	600	8
Hunnicutt Camp Drlg	2	dsl	1520	Olwl 660	880	12.5
	3	dsl	1400	Nat CA50	640	105
	4	dsl	1400	Olwl 66	640	11
	5	dsl	980	Idco 525	480	9
	6	d-e	4000	Nat 110	2000	18
NECK Drlg	1	gas	350	Wils Super	350	4
	2					
Owens Serv, Jack	8	dsl	1800	RMI 750	870	10
Pyramid Oil	3	dsl	400	Idco H30	300	3
Scandinavian Montgomery Drlg	3	dsl	1200	Nat 75	700	12
	8	dsl	1200	Nat 75	700	12
	11	dsl	1500	Emsco GB800	1500	12
BUTTE						
Bawden Drlg	11	d-e	1600	Emsco A800WE	1000	14
Owens Serv, Jack	2	dsl	200	Idco H38	350	4
COLUSA						
Atlantic Oil	12	dsl	850	Nat 50A	680	9
	15	dsl	1020	Nat T32	340	7.5
CONTRA COSTA						
Owens Serv, Jack	7	dsl	1100	Coop 350	450	7.5
FRESNO						
Hylton Drlg	7	dsl	300	Nat T12	380	4
Republic Drlg	22	dsl	1900	MC U36A	950	10
GEYSERVILLE						
Atlantic Oil	6	dsl	810	Nat 80	1680	14

CALIFORNIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
GLENN						
Atlantic Oil	11	dsl	1350	Nat 80	1350	14
IMPERIAL						
Brinkerhoff-Signal	56	d-e		Emsco A110E	2700	18
Cleveland Drlg	6	d-e	2400	Nat 110UE	1500	20
Monterey Drlg	B	d-e	1000	Nat 80B	2000	14
KERN						
Atlantic Oil	2	dsl	1260	Nat 55	1260	11
	3	dsl	680	Idco H40	370	7.5
	4	dsl	900	Nat 55	900	10
	5	dsl	680	Nat 50A	680	9
	8	dsl	1020	Nat T32	370	7.5
	10	dsl	1020	Nat T32	370	7.5
Barnes Core Drlg	711	dsl	750	HT 5500	450	5.5
Brinkerhoff-Signal	8	g-b	1000	G-D 800	1000	14
California Prod Serv	M-17	dsl	300	Crdw K200C	308	4
	M-70	dsl	446	Idco H35CKD	424	4
	M-71					
Cleveland Drlg	3	d-e	2000	Nat 100	1500	18
	4	dsl	1200	Nat 75CA	800	12
	5	dsl	2400	Idco Super 711E	1600	18
	7	dsl	1000	Nat 75	800	12
	8	dsl	800	Idco 750	700	10
Coastal Drlg	1	dsl	550	Crdw KM250	250	5.5
Dahlquist Drlg	1	dsl	450	Tson 3000	225	3
	5	dsl	360	Fail 2000	200	2
Edwards Well Serv	D30	dsl		Idco	300	
Gary Drlg	D-10	dsl	628	Hoop	400	5.5
	D-12	dsl	382	Emsco GB160T	300	4.5
	D-13	dsl	450	Emsco GB16T	300	4
	D-14	dsl				
	D-16	dsl				
	D-30	dsl	300	Idco 35		
	D-4	dsl	475	Emsco GB160T	450	4.5
	D-5	dsl	382	Hoop GT34	300	3.5
	D-6	dsl	600	Emsco GB160T	400	4.5
	D-7	dsl	381	Gary	200	2
	D-8	dsl	450	Emsco GB160T	400	4.5
	D-9	dsl	628	Cbot	400	5.5
	1	dsl	450	Hoop	400	5
	14	dsl	800	Gary	640	9
	15	dsl	800	Gary	640	9
Golden State Drlg	D-10	dsl	750	Custom HT	450	5.5
	D-6	dsl	750	Custom HT	450	5.5
	D-8	dsl	750	Chal 78	450	5.5
Hylton Drlg	1	dsl	400	Nat T12	300	4
	4	dsl	380	HT MR10	150	3
	5	dsl	380	Idco H30	300	5
	8	dsl	380	Idco H30	300	5
	9	dsl	400	Idco H30	300	5
K B Drlg & Prod	7			Coop		
Kenai Drlg	6	dsl	850	Emsco J750	800	8
	34	dsl	1030	Emsco GB350	600	7.5
KB Drlg & Prod	12	dsl	350	Wils Mogul	350	5
Loffland Bros	64	d-e	1290	MC U36EA	1200	10
	98	d-e	2000	MC U40E	1600	13
	185	gas	1600	MC U914C	1900	18
Marlin West	Marlin 11	d-s	2000	Nat 110	1600	18
	Marlin 12	d-s	2000	Nat 110	1600	18
	13	d-s	2000	Nat 110UE	1600	18
Melton Drlg	3	dsl	500	Emsco 160	350	4
Monterey Drlg	F	d-s	500	Idco H30E	500	8
Montgomery Drlg	8					
	9					
	12	dsl	2000	Emsco GB800	75	120
	14	dsl	1200	Olwl 66	700	10.5
	16					
	17	d-e	2000	Olwl 940E	2000	20
	18					
Republic Drlg	21	dsl	2100	Nat 55	1200	12
KINGS						
Coastal Drlg	7	dsl	2000	Emsco J750	825	11.5
Montgomery Drlg	10					
	19					
Scandinavian Montgomery Drlg	9	d-e	2200	Nat 1320UE	3000	22
LAKE						
Brinkerhoff-Signal	81	d-e	2100	Olwl 760E	2100	16
Loffland Bros	25	d-e	2160	MC U914CE	2200	18
	50	d-e	1420	MC U712A	1600	17
LONG BEACH						
Bawden Drlg	22	d-e	700	Emsco M58	800	10
LOS ANGELES						
Bawden Drlg	38	d-e	1800	Olwl 940E	1500	16
Big Chief Drlg	18	dsr	500	Hoop GXXTA	450	6
Brinkerhoff-Signal	90	dsl	4000	G-D 1500E	2000	25
California Prod Serv	M-72	dsl	500	Idco H35CKD	424	4
	M-73	dsl	370	Idco H35CKD	424	4

CALIFORNIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
LOS ANGELES (Cont'd)						
Kellogg & Sons, K L	40	el	850	Nat 610	750	12.5
	41	el	850	Nat 75	1000	14
Monterey Drlg	C	d-e	1000	Nat 100ME	1500	16
Republic Drlg	6	dsl	636	Idco H40	475	5.5
	16	dsl	636	Idco H35	318	4
	17	dsl	1100	Cbot 1287	636	7
Thompson Drlg	2	dsl	800	Emsco D550T		6.5
MONTEREY						
Loffland Bros	328	dsl	2160	Nat 130	2400	22
ORANGE						
Bawden Drlg	27	d-e	1500	Emsco A550E	1000	12
Loffland Bros	125	d-e	2180	MC U914	2200	18
RIO VISTA						
Bawden Drlg	18	d-e	2300	Nat 110M	150	16
SAN JOAQUIN						
Montgomery Drlg	7	dsl	1200	Nat 75	700	11
SAN MATEO						
Montgomery Drlg	15	d-e	2000	Nat 75CB	1000	14
SANTA BARBARA						
Bawden Drlg	50	d-m	1500	Nat 55	700	11
Kenai Drlg	4	dsl	900	Idco H40D	400	7
	5	dsl	1100	Nat T32	400	6.5
	7	dsl	800	MAC 400	425	7
	8	dsl	825	W-M T4054	425	70
	9	dsl	825	Idco H40	400	65
	24	d-e	1600	Nat CAE-75	1000	12
Montgomery Drlg	3					
SISKIYOU						
Brinkerhoff-Signal	83	d-e	2000	Emsco D3	2000	16
SOLANO						
Atlantic Oil	7	dsl	1020	Nat T32	450	7.5
Bawden Drlg	23	d-e	1700	Emsco A800WE	1000	14
Cleveland Drlg	2	dsl	600	S/B RR400	450	5
Loffland Bros	232	dsl	1000	MC U15	1000	12
Monterey Drlg	D	d-s	700	S/B N75	700	10
SONOMA						
Brinkerhoff-Signal	87	dsl	2000	Nat 80UE	2000	26
Coastal Drlg	8	dsl	900	Olwl 52T	550	7.5
Loffland Bros	27	d-e	2160	MC U20	2200	17
	92	d-e	2160	MC U914CE	2200	18
	105	d-e	2160	MC U914EC	2200	18
	306	gas	1150	S/B N95	1300	17
TEHAMA						
Hunnicutt Camp Drlg	1	dsl	950	Nat T32	320	9
VENTURA						
Bawden Drlg	10	d-e	2300	Olwl 940E	1500	18
	24	d-e	1550	Nat 80E	1000	14
Cal Pacific Drlg	3	d-e	1200	Sup 700UE	700	10
	7	d-e	950	Sup 700UE	700	7.5
Kenai Drlg	29	dsl	1200	Wils Giant	1200	10
	30	dsl	800	Idco H40	400	65
Loffland Bros	16	dsl	1900	MC U914C	2000	18
	212	gas	2000	MC U914A	1600	18
	217	gas	1600	MC U914C	1900	18
Monterey Drlg	A	d-e	1000	Idco 1040E	2000	18
Montgomery Drlg	1	d-e	3200	Nat 1320UE	3645	25
	2	d-e	2000	Olwl 940E	3000	18
Republic Drlg	11	dsl	636	Idco H30	318	3.5
	20	dsl	2400	S/B N95	1800	18
YOLO						
Atlantic Oil	14	dsl	1020	Idco H		6.5
Owens Serv, Jack	4	dsl	300	Idco H35	318	4
	6	dsl	300	Idco H35	300	4

COLORADO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Bow Island Drlg	37	dsl	278	W-N 2000	175	3
	38	dsl	278	W-N 2000	175	3
Cardinal Drlg	4	dsl	560	Emsco GB350T	760	8.5
Excell Drlg	2	dsl	375	671 GMC	210	3.3
	4	dsl	230	Ewb M75	230	2
Toltek Drlg	1	dsl	440	S/B N4	440	8.5
Twin Arrow	309	dsl		S/B	575	6
Westburne Drlg	55	d-s	3310	Nat 1320UE	3310	22
	64	dsl	1680	MC U914C	1680	18

COLORADO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ADAMS						
Allison Bros Drlg	2	dsl	500	Crdw KB500	600	8
Exeter Drlg Northern	1	dsl	500	Nat 50A	750	9.5
	6	dsl	330	Nat T20	300	6
	22	dsl	500	MC U15	750	9.5
Gibson Well Serv, J W	98	dsl	700	Sup	700	10
Western Well Drlg	3	dsl	350	Fail	350	4
ARAPAHOE						
Exeter Drlg Northern	2	dsl	375	Emsco GA250	460	7.5
BACA						
Murfin Drlg	22	dsl	500	Nat 370	600	7.5
BOULDER						
Exeter Drlg Northern	40	dsl	500	MC U15	750	9.5
Tower Drlg	2	dsl	1000	Troy 600	600	10
CHEYENNE						
Murfin Drlg	14	dsl	400	Nat T45	700	8.5
DOLORES						
Loffland Bros	29	d-e	1400	MC U36A	1600	11
ELBERT						
Exeter Drlg Northern	23	dsl	500	MC U15	750	8.7
GARFIELD						
Veco Drlg	5	dsl	1400	OIME 750	950	11
	8	dsl	800	S/B 45	750	10
HUERFANO						

NICOR Drilling Company
(918) 587-5507

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Nicor Drlg	36	dsl	1150	G-D 500	650	11
	44	d-e	1500	G-D 500E	650	11
KIOWA						
Murfin Drlg	25	dsl	600	Nat 370	600	7.5
Sage Drlg	1	dsl	350	Nat T32	500	7
KIT CARSON						
Murfin Drlg	27	dsl	475	S/B N46	580	10
True Drlg	26	dsl	900	Idco H725SC	900	10
LA PLATA						
Aztec Well Serv	124	dsl	600	Wils 75	1100	10
LARAMIE						
Toltek Drlg	2	dsl	680	Nat 50A	875	10.5
LINCOLN						
Murfin Drlg	26	dsl	475	S/B N42	580	10
LOGAN						
Allison Bros Drlg	7	dsl	500	Idco BIR800	900	12
Toltek Drlg	4	dsl	440	MC U34	440	7.5
MESA						
Loffland Bros	12	dsl	840	Idco Hydrair H44CSC	868	10
Nicor Drlg	37	dsl	965	Fail LC90	340	5
	36	dsl	820	Nat D300	260	5.5
Veco Drlg	1	dsl	400	Fail 90	400	5
	6	dsl	1400	OIME 750	950	11
MOFFAT						
Atco Drlg	5	dsl	326	Nat T32	326	7.5
Harpel Drlg	6	dsl	1300	Emsco D2	1300	14
MONTEZUMA						
Arapahoe Drlg	3	g-b	300	Wils Mogul	320	6.5
Coleman Drlg	3	dsl	555	Idco H44	700	8
Loffland Bros	26	d-e	2000	MC U36	1600	11
Mesa Drillers	1	dsl	600	Nat 50A	750	8
MORGAN						
Allison Bros Drlg	1	dsl	500	Idco BIR800	800	12
Allison Drlg	3	dsl	360	Crdw KB500	380	7.5
PROWERS						
Murfin Drlg	12	dsl	400	Beth C50	600	8
Zenith Drlg	7	dsl	600	S/B N4	400	6.9

COLORADO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
RIO BLANCO						
All Western Drlg	4	dsl	1500	Sup 700	750	10
Loffland Bros	236	dsl	1260	MC U15	1000	10
Manning, R L	11	dsl	720	Nat 370	720	8.5
	19	dsl	925	Beth M58	980	10
Parker Drlg	56	dsl	1000	OIME SD5	1000	12.5
	148	dsl	1000	OIME 750	1000	13
Rio Grande Drlg	2	dsl	1000	Nat 80B	1500	16
Shelby Drlg	53-E	d-e	1000	Nat 370ESCR	700	10
RIO GRANDE						
Dual Drlg	34	d-e	2000	Emsco D3	1000	16
WEBB						
Toltek Drlg	3	dsl	680	S/B N4A	440	8.5
WELD						
Exeter Drlg Northern	4	dsl	375	Nat T32	460	7.8
	5	dsl	300	MC U34D	300	6
	12	dsl	500	Nat T45	750	9.5
	14	dsl	375	Beth C50	600	7.8
	25	dsl	375	MC U15	500	8.5
	33	dsl	500	MC U15	750	8.5
	42	dsl	375	Nat T32	460	7.8
Gibson Well Serv, J W	75	dsl	450	Crdw K8500	450	8
Tower Drlg	1	dsl	550	Mac 400	400	8.5
	3	dsl	600	S/B N45	500	9
	4	dsl	600	S/B N46	800	10
YUMA						
Western Well Drlg	1	dsl	350	Midway 2000	350	2.5
	2	dsl	350	Fail H2000	350	3.5

FLORIDA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
COLLIER						
Penrod Drlg	106	dsl	1575	Nat 80B	1760	15
ESCAMBIA						
Tesoro Drlg	2	dsl	2600	Nat 1320M	2742	20
LEE						
Penrod Drlg	108	dsl	1000	Nat 80B	1760	15
SANTA ROSA						
Penrod Drlg	15	dsl	3000	G-D 2100	2200	30
Tesoro Drlg	3	dsl	2600	Nat 1320M	2742	25
WEBSTER						
Penrod Drlg	109	dsl	2000	S/B N75A	1760	15

GEORGIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
WORTH						
Hughes Drlg	16	dsl	500	S-Star SS40	220	3.5

IDAHO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
BEAR LAKE						
Parker Drlg	169	dsl	1650	OIME SL1000P	1650	20
CARIBOU						
Loffland Bros	57	d-e	1800	Nat 80B	2000	16

ILLINOIS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Beard Drlg (IL)	1	dsl	400	Nat T12	350	4.5
Gallagher Drlg	4	dsl	500	Beth S45E	476	6
Snyder Drlg Well Serv	1	dsl	400	S/B 55	400	6.5
Clark						
Precision Expl	2	dsl	400	WEIS W-45400	400	6.5
CLAY						
Mitchell Drlg	1	dsl	400	Beth SN45	400	6
Precision Expl	1	dsl	400	Nat T20	470	6
EDWARDS						
Mitchell Drlg	7	dsl	400	Idco H35	400	6.5
Ram Drlg	2	dsl	1800	Nat T12	1800	5
	3	dsl	380	Nat T12	380	4
	4					

ILLINOIS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
FAYETTE						
Smith Drlg	2	dsl	250	Nat T8	320	3
	7	dsl	500	G-D 2500	380	3
	8	dsl	300	Lee	380	4.5
FRANKLIN						
Mitchell Drlg	4	dsl	400	S/B N4	400	6
GALLATIN						
Smith Drlg	3	dsl	320	S/B N4	550	6
HAMILTON						
Ram Drlg	1	dsl	1800	Idco HD35	1800	6
JEFFERSON						
Precision Expl	5	dsl	400	Nat T20	385	6
LAWRENCE						
Smith Drlg	6	dsl	1025	S/B N45M	650	10
MARION						
Mitchell Drlg	9	dsl	600	G-D 500M	600	10
RICHLAND						
Precision Expl	4	dsl	400	Nat T20	400	6
SALINE						
Mitchell Drlg	5	dsl	400	S/B N4	400	6
WABASH						
Davis Drlg	1	dsl	300	Wils Mogul 38	300	3.5
WASHINGTON						
Oelze, Elmer Jr	1	dsl	475	Lee 650	475	8.5
	2	dsl	475	W-N 25040	380	6
	3	dsl		W-N S34A	160	5
	4	gas		Crdw HL	140	4
WAYNE						
Barr Drlg	1	dsl	671	Nat T12	335	4.5
Precision Expl	3	dsl	400	Nat T16	470	6
Ram Drlg	5	dsl		Nat T16	Cat 340	8
Snyder Drlg Well Serv	2	dsl	400	Beth 545	400	6
WHITE						
Harris Drlg	1	dsl	500	Nat T12	380	4
	4	dsl	500	Nat 50	380	6
Smith Drlg	11	dsl	450	Nat T20	450	6
Wilson Inc, Les	11	dsl	300	Idco H35	450	5
	12	dsl	500	Idco H35	400	5
	15	dsl	500	Idco H35	400	5
	17	dsl	500	Idco H37	550	6

INDIANA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Gwaltney Drlg	1	dsl	300	Nat T12	225	3
Kendall Drlg	3	dsl	450	S/B N4	300	5.5
Lohmann Inc, J Roy	21	dsl		Nat T12		4
POSEY						
J-V Drlg	6	dsl	145	Speedstar SS15S	145	1.6/3.5"
Kendall Drlg	2	dsl	450	S/B N4	350	5.5
Lohmann Inc, J Roy	6	dsl	600	Nat 50	600	6.5
Mitchell Drlg	8	dsl	400	MAC 300	300	4.2
Smith Drlg	9	dsl	320	S/B N4	450	6
VANDERBURGH						
Big Seven Drlg	7	dsl	450	Emsco GB250	400	6
J-V Drlg	8	dsl	145	Speedstar SS15S	145	1.6/3.5"
	9	gas	85	Cbot F	85	6/2.88"

KANSAS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Abercrombie Drlg	10	dsl	365	Cbot Tri Mid	220	4.5
	11	dsl	600	Emsco 350	700	7.5
Berentz Drlg	3	dsl	350	Nat T12	350	3.5
	4	dsl	225	S-Star	225	1.5
Carter Land & Cattle	1	dsl	250	G-D 1000	350	1
Edco Drlg	3	dsl	125	Crdw J101	235	7.5
Gabbert-Jones	12	dsl	450	S/B N42	525	8
Hamm Drlg	1	dsl	400	W-N Apache	425	6

KANSAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED (Cont'd)						
KANDRILCO Inc	1	dsl	375	Emsco GA250T	475	5.5
	2	dsl	375	MAC 400	475	5.5
Peters Drlg	4	dsl	250	Crdw RL	250	6
	8	dsl	250	Crdw DB200	250	6
Rains & Williamson Oil	4	dsl	400	S/B N4	450	5.5
	5	dsl	400	Idco H40	525	7
	11	dsl	300	S/B	500	4.5
Red Tiger Drlg	1	dsl	700	MC U15	700	6
	2	dsl	700	Emsco GA250	700	5.5
	3	dsl	700	Idco H35	700	5.5
	4	dsl	700	Idco H35	700	5.5
	5	dsl	700	Unit U15	700	6
	6	dsl	700	Idco H35	700	6
	7	dsl	700	Emsco GA250T	700	5.5
	8	dsl	700	Emsco GA250T	700	5.5
	9	dsl	700	MC U10	700	6
	10	dsl	700	TSM 6000	700	7
BARBER						
Aldebaran Drlg	2	dsl	525	Nat T32	500	7.2
Allen Drlg	5	dsl	525	Nat 370	600	7
Beredco	2	dsl	525	Nat 370	575	7
Damac Drlg	1	dsl	350	Wils Giant	350	6
Graves Drlg	1	dsl	100	S/B N4	400	5
H30 Drlg	3	dsl	280	Idco H40	312	8
Leben Drlg	7	dsl	500	G-D 3000	500	7
Wheatstate Oilfield	1	dsl	340	Idco H35	525	6
BARTON						
Allen Drlg	3	dsl	375	Idco H25	480	5
Damac Drlg	3	dsl	930	Wils Mogul	620	9.5
	7	dsl	550	S/B N4	375	6
Duke Drlg	1	dsl	375	MC	375	5
	3	dsl				
H30 Drlg	2	dsl	280	MAC 400	312	8
Rockhold Engr	3	gas		Crdw RL	150	
BUTLER						
Brandt Drlg	3	dsl	350	W-N R4	330	3.5
Edco Drlg	5	dsl	475	Crdw KB200	375	4.5
Range Drlg	1	dsl	350	Cbot SAL4500	440	3.5
CHAUTAUQUA						
Edco Drlg	4	dsl	125	Davey	235	7.5
White & Ellis Drlg	5	dsl	300	Emsco GA150	475	4
CLARK						
Damac Drlg	8	dsl	400	Idco H35	450	7.5
Lauck Oil	1	dsl	350	MC U15	400	6
Murfin Drlg	19	dsl	525	Wils Super Mogul 42	525	6.5
Rine Drlg	8	dsl	700	S/B N55	700	8.5
COFFEY						
White & Ellis Drlg	3	dsl	345	Nat T12	345	4.5
COMMANCHE						
Gabbert-Jones	9	dsl	310	Nat T32	450	6
COWLEY						
R R A Inc	1	dsl	335	Coop 350	325	6.5
Range Drlg	2	dsl	350	Wils Giant	350	5.5
	3	dsl	350	MC U10A	350	5.5
White & Ellis Drlg	4	dsl	300	Emsco GA250	300	5
DECATUR						
Murfin Drlg	2	dsl	400	Nat T32	400	6
EDWARDS						
H30 Drlg	12	dsl	300	Crdw V450	525	6.5
Sterling Drlg	2	dsl	350	MC RV34B	285	4.8
	4	dsl	450	MC U15	285	5
ELLIS						
Allen Drlg	4	dsl	375	Nat T16	525	5
Big Springs Drlg	3	dsl	450	S/B N4	450	5
Buffalo Drlg Co	7	dsl	360	S/B N4	460	5.5
Duke Drlg	2	dsl	250	Nat	250	5
Dunne-Gardner Petr	2	dsl	400	Idco H35	450	7
ELLSWORTH						
White & Ellis Drlg	2	dsl	425	Emsco GA250	475	4.5
FINNEY						
Cheyenne Drlg	1	dsl	450	Olwl 52T	525	6.5
	6	dsl	800	Beth 450T	750	85
Sage Drlg	2	dsl	350	Olwl T52	500	6.5
FORD						
Slawson Drlg	4	dsl	6500	Idco H35	380	6
GOVE						
Abercrombie Drlg	8	dsl	365	Beth S50	365	5.5
	9	dsl	365	Beth Breeze	365	5.5

KANSAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total Hp All Main Mud Pumps •	Drawworks Make And Model •	Total Hp Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
GOVE (Cont'd)						
Aldebaran Drlg	1	dsl	525	S/B N42	800	7.2
Beredco	3	dsl	500	MC U15	800	7.5
Murfin Drlg	21	dsl	375	Idco H35	475	6.5
Slawson Drlg	3	dsl	480	Idco H35	480	7
GRAHAM						
Big Springs Drlg	2	dsl	380	Nat T32	380	5.5
GREELEY						
Gibson Well Serv, J W	93	dsl	450	Cbot M1287	450	6
GREENWOOD						
Edco Drlg	1	dsl	375	Sullivan 300A	318	3
HARPER						
Bergman Drlg	1	dsl	350	Emsco	350	5.5
FWA Drlg	32	dsl	800	Wils Mogul 42	375	6
Gabbert-Jones	6	dsl	450	Nat T32	310	6
Heartland Drlg	1	dsl	500	Idco H088	650	6.5
H30 Drlg	5	dsl	312	Idco H36	510	6.5
Rains & Williamson Oil	3	dsl	525	Crdw J080	525	6.7
Sweetman Drlg	1	dsl	800	Nat 370	800	9
HODGEMAN						
White & Ellis Drlg	5	dsl	410	S/B N46	750	10.5
JACKSON						
Edco Drlg	6	dsl	375	Crdw KB150	435	3.5
KEARNY						
Cheyenne Drlg	4	dsl	900	Nat 370	600	8.5
KINGMAN						
Brandt Drlg	2	dsl	350	Nat 370	800	7.5
Kansas Drlg & Well Serv	4	dsl	750	KREMCO K600	500	7
Pickrell Drlg	10	dsl	370	MC U15	370	5.5
KIOWA						
Abercrombie Drlg	6	dsl	385	Idco H35	385	6
Eagle Drlg	1	dsl	600	Nat 370	650	7
Freeman Drlg	1	dsl	525	Idco H40	600	8.5
Wheatstate Oilfield	3	dsl	340	Emsco 250	425	5
White & Ellis Drlg	8	dsl	410	Emsco 380	750	7.5
LANE						
Galloway Drlg	1	dsl	300	Nat T32	300	5
H30 Drlg	11	dsl	280	Idco H38	312	5.5
Murfin Drlg	25	dsl	375	Idco H35B	475	6.5
Slawson Drlg	1	dsl	380	Idco H35	380	5.5
LOGAN						
Abercrombie Drlg	5	dsl	750	Idco 725	800	10
Stoeppelwerth Drlg	1	dsl	375	Nat T32	375	5.5
MARION						
Blackstone Drlg	4	dsl		BDW	450T	4
Edco Drlg	2	dsl	375	Sullivan 300	375	3
Kansas Drlg & Well Serv	1	dsl	385	Cbot 1068	380	4
MC PHERSON						
Blackstone Drlg	3	dsl	300	BDW 450T	300	5
MEADE						
Bohannan Drlg	2	dsl	750	Idco H38BC	850	8.5
Gabbert-Jones	3	dsl	410	Emsco 350	475	8
MORTON						
Gabbert-Jones	8	dsl	450	Nat T32	450	6
NEOSHO						
Carter Land & Cattle	2	dsl	250	G-D 1000	350	1
NESS						
Allen Drlg	1	dsl	450	Nat T32	525	5
Pickrell Drlg	1	dsl	450	MC U15	450	6.5
Rains & Williamson Oil	2	dsl	450	Oilwell 52-T	450	6.7
Slawson Drlg	2	dsl	380	Idco H35	380	5.5
OSBORNE						
Rains & Williamson Oil	9	dsl	300	Beth	300	4.5
PAWNEE						
Farmer, John O	4	dsl	330	Idco H30	330	5.5
H30 Drlg	7	dsl	280	MC Mac400	312	8
J W Drlg	1	dsl	370	MC U15	370	6
Murfin Drlg	16	dsl	400	Idco H35	475	6.5

KANSAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total Hp All Main Mud Pumps •	Drawworks Make And Model •	Total Hp Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
PRATT						
Dunne-Gardner Petr	1	dsl	350	Emsco 250	450	5
Wheatstate Oilfield	2	dsl	450	Mini-Max 15	450	6.5
RAWLINS						
Murfin Drlg	3	dsl	400	Nat T25	400	6
RICE						
Sterling Drlg	5	dsl	350	Emsco GB250	600	7
	8	dsl	350	G-D 2000	350	2.8
ROOKS						
Abercrombie Drlg	4	dsl	385	Idco H35	385	8
Murfin Drlg	8	dsl	400	Mac 400	400	6
Rockhold Engr	7	gas		W-N	200	
RUSSELL						
Shields Drlg	2	dsl	300	Beth C50	300	5.5
SALINE						
Big Springs Drlg	1	dsl	380	Beth S4513	380	5
Kansas Drlg & Well Serv	5	dsl	750	Crdw KB200C	40	8
SCOTT						
Abercrombie Drlg	1	dsl	385	MC U34	385	8
SEDGWICK						
McAllister Drlg	9	dsl	300	Idco H30	300	5.5
SEWARD						
Bohannan Drlg	1	dsl	750	Idco 725	750	9.5
Sage Drlg	5	dsl	350	Nat T32	500	7
Zenith Drlg	2	dsl	400	Emsco 350	400	9
	4	dsl	1200	U15	800	10.5
	6	dsl	800	Emsco 350	400	9
STAFFORD						
Aldebaran Drlg	4	dsl	550	S/B N42	500	7.2
Buffalo Drlg Inc	1	dsl	500	S/B N4	400	6
Lauck Oil	2	dsl	350	S/B N45	400	6
Rains & Williamson Oil	7					
Sterling Drlg	1	dsl	350	MC U34	285	4.8
Wheatstate Oilfield	4	dsl	525	Emsco GB180	525	4
White & Ellis Drlg	10	dsl	410	Beth S45E	410	5
STANTON						
Gabbert-Jones	11	dsl	310	Nat 370	450	6
STEVENS						
N R G Drlg	1	dsl	580	Wils Mogul 42	580	7
SUMNER						
Aldebaran Drlg	3	dsl	525	Idco	800	7.2
McAllister Drlg	10	dsl	300	S/B N4	300	60
White & Ellis Drlg	7	dsl	300	MC U34	475	4
TREGO						
Abercrombie Drlg	7	dsl	385	MC U34	385	5
	12	dsl	365	Beth Freeze	300	5.5
Allen Drlg	2	dsl	375	Nat T32	525	5
Murfin Drlg	16	dsl	400	Emsco S45E Beth	400	6

KENTUCKY

• Contractor	Rig No. •	Type Power •	Total Hp All Main Mud Pumps •	Drawworks Make And Model •	Total Hp Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Gallagher Drlg	5	dsl	300	Nat T12	310	3.5
	7	dsl	350	Nat T20	475	5
DAVIESS						
Kendall Drlg	1	dsl	450	Nat T12	300	40
HENDERSON						
Big Seven Drlg	11	dsl	360	Emsco GB180	335	4
HOPKINS						
Crescent Drlg	4	dsl	525	Emsco 545A	420	5
W W Corp	1	dsl	450	G-D 3000	450	5
Weal Drlg	2	dsl	335	Crdw S	335	4
JOHNSON						
Ray Resources	6	dsl	450	Idco DIR7015	700	8
UNION						
Mitchell Drlg	6	dsl	400	Wils Super 38	400	8
WEBSTER						
Crescent Drlg	8	dsl	525	Emsco 545B	420	5
Weal Drlg	1	dsl	325	Nat T12	380	4
WHITLEY						
Norman Drlg, James R	1	dsl	750	I-R	400	2.5

LOUISIANA

• Contractor	Rig No. •	Type Power •	Total Hp All Main Mud Pumps •	Drawworks Make And Model •	Total Hp Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
B-E Drlg	1	dsl	900	Emsco A500	900	10
Bailey Drlg	2	dsl	2000	Nat 808	1950	14
Comet Drlg	4	dsl	1700	S/B N75	980	12
	6	dsl	2560	Idco Super 7-11	1700	18
	10	dsl	1700	Cbot 980	980	10.5
	14	dsl	2800	G-D 1500	2800	25
Continental Drlg	3	d-e	2800	Idco E1700	1700	18
Culver Drlg	10	dsl	1500	Nat 110	1500	16
	14	dsl	2400	MC U914	2400	16
D B Drlg	28	dsl	1650	Emsco ED4	1650	15
	29	dsl	1100	Nat 75	1100	13.5
	30	dsl	1100	Beth 450	1100	12.0
Harris Well Serv	17	dsl	316	Idco H35	316	7.5
	18	dsl	316	Idco H35	316	7.5
	19	dsl	316	Idco H35	316	7.5
	21	dsl	316	Idco H35	316	7.5
	22	dsl	316	Idco H35	316	7.5
	23	dsl	316	Idco H37	400	8
	24	dsl	316	Idco H35	316	7.5
	25	dsl	632	Idco H44	632	10
	27	dsl	316	Idco H35	316	7.5
	28	dsl	316	Idco H35	316	7.5
	29	dsl	316	Idco H35	316	7.5
	31	dsl	316	Coop LTD350	316	7.5
	32	dsl	316	Idco H35	316	7.5
	33	dsl	900	Idco H44	900	10
	34	dsl	600	Cbot 750	980	8
	35	dsl	600	Wils 75	980	10
Justiss Oil	27	dsl	700	Beth MC450	980	12
	38	dsl	2680	Emsco J1100	2680	20
Mosley Well Serv	7	dsl		Cbot	475	10
Noble Drlg	OW-21	e-e	3300	Oilwell E2000	3300	25
	OW-31	el	3135	Oilwell E3000	3135	25
Transcontinental Drlg-Magnolia	1	dsl	350	Emsco GB250T	350	6.5
	23	dsl	1000	S/B N75	1000	12
	83	dsl	1000	G-D 800	1000	15
ACADIA						
Bailey Drlg	6	dsl	3000	Nat 110M	3000	18
	21	dsl	500	Emsco J750	880	11
Butler-Johnson	15	dsl	1000	Nat 808	1950	15
Cliffs Drlg	26	dsl	2000	Nat 110	1650	18
Delta Drlg	93	d-e	2000	Emsco D3 Type II	2562	16
	97	dsl	2000	Emsco J1100	1560	16
Great Southern Oil & Gas	5	dsl	500	Wils	318	6
	42	dsl	665	Idco	636	10
Grey Wolf Drlg	8	d-e	3000	Emsco C2 Type II	2000	25

NICOR Drilling Company
(918) 587-5507

• Contractor	Rig No. •	Type Power •	Total Hp All Main Mud Pumps •	Drawworks Make And Model •	Total Hp Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Nicor Drlg	68	dsl	2100	MC U712A	1200	16
Power Rig Drlg	22	d-e	2700	Idco E1700	1700	18
ALLEN						
Delta Drlg	35	d-e	2800	Emsco C1 Type II	3100	20
Power Rig Drlg	8	dsl	800	Emsco D2	880	11
ASCENSION						
Bailey Drlg	7	dsl	1200	G-D 800	1200	11
Loffland Bros	167	dsl	2180	MC U914C	2400	20
ASSUMPTION						
Nicor Drlg	58	dsl	1800	MC U15	700	12
Wilson Bros Drlg	6	dsl	2880	Nat 1320	2700	30
BATON ROUGE						
Penrod Drlg	110	dsl	1800	Nat 1625M	2200	30
BEAUREGARD						
Challenger Drlg	21	dsl	900	S/B N75	1000	12
Murco Drlg	6	dsl	2200	S/B N95	1880	14
Richards Drlg Co	3	dsl	1800	S/B N75	1200	12.5
Tesoro Drlg	4	dsl	2800	Nat 1320M	2742	25
Woolf & Magee	3	dsl	1450	G-D 700	1275	13.5
	6	dsl	850	Idco H35	500	10
	11	dsl	850	Beth S45E	500	9.5
BIENVILLE						
Noble Drlg	E563	dsl	800	Emsco A500	800	12
Sawyer Drlg & Serv	14	dsl	540	Duggan D55	540	9.5
BOSSIER						
Butler Johnson	5	dsl	1800	S/B N95	1800	20
	6	dsl	2000	S/B N95	1800	15
H & S Drlg	2	dsl	1700	S/B N95	2145	14

LOUISIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
BOSSIER (Cont'd)						
Nowotny & Conley Drlg	1	dsl	2000	OIME SL-1000	1200	15
Remco Drlg	1	dsl	900	Cbot 2042	475	10
	2	dsl	1200	S/B TR800	800	12
Sawyer Drlg & Serv	4	dsl	1000	S/B N7	1000	12.5
	12	dsl	900	Wils Giant	900	12
Shuler Drlg	5	dsl	325	Beth	300	5/ 3.5"
CADDO						
Lagrone Drlg	8	d-e	2000	Idco 2500E	2500	22
Nelson Drlg & Well Serv	1	dsl	600	S-H 7000	600	9
Sawyer Drlg & Serv	9	dsl	800	S/B N45-M	800	10
Wheless Drlg	1	d-s	3200	Emsco C2 Type II	2800	25
CALCASIEU						
American Well Serv & Drlg	11	dsl	1700	S/B H14610A	575	8
Comet Drlg	12	dsl	1700	Cbot 1200	1200	13.5
Delta Drlg	85	d-s	2960	Emsco C2 Type II	3456	25
Goldrus Drlg	2	d-e	2000	Olwl E2000	2000	25
Grey Wolf Drlg	4	dsl	1500	Emsco GB800	800	12.5
	5	d-e	2000	Emsco EDA	2000	25
Hanley Drlg	5	dsl	4000	Emsco C1	2000	18
Loffland Bros	300	dsl	2400	MC U1220	2775	22
Moran Bros	174	dsl		Nat 110M		18
Nicklos Drlg	71	d-e	2800	Olwl E2000	2000	25
Nicor Drlg	77	d-m	2300	Nat 100	750	16
NL Well Serv	247	dsl	700	Cbot 2042	600	7.5
Parker Drlg	215	gas	2200	OIME 1500C	2200	22
Power Rig Drlg	17	d-e	2000	Idco E1700	2400	16
CALDWELL						
D B Drlg	16	dsl	174	Schf SC800	1240	12.5
Sawyer Drlg & Serv	10	gas	1200	Wilm 1000	1200	13
CAMERON						
Bailey Drlg	8	dsl	2000	Nat 110M	1300	20
Cliffs Drlg	16	dsl	2600	Nat 1320	2475	25
CRC Mallard Well	15	dsl	1300	Wils 90	800	14.5
	16	dsl	1300	Wils 90	800	14
	19	dsl	1300	Wils 90	800	14.5
Goldrus Drlg	11	dsl	1600	S/B N12A	2000	16
Grey Wolf Drlg	10	dsl	2000	Emsco C1	2000	16
Power Rig Drlg	14	d-s	3200	Idco E2100	4161	25
	16	d-e	2800	Emsco C1 Type II	3084	18
	18	dsl	3200	Emsco C2	2000	25
	20	d-e	2800	Emsco C2	2000	30
Woolf & Magee	12	dsl	850	Idco H35S	500	10
CATAHOULA						
D & D Drlg	2					
	5	dsl	700	Beth S45E	500	80
Justiss Oil	15	dsl	400	Beth 45E	300	6.5
CLAIBORNE						
Exeter Drlg Southern	45	dsl	2000	G-D 700	1000	12.5
Nelson Drlg & Well Serv	2	dsl	1000	S/B N75	1000	13
Sawyer Drlg & Serv	1	dsl	700	S/B N7	700	11
COLORADO						
M N D Drlg-Southern	11	d-e	1820	S/B N95	1820	20
CONCORDIA						
Justiss Oil	17	dsl	350	Beth S45E	300	7.5
Murco Drlg	58	d-e		Sup 400XE		54
New Drlg, David	5	dsl	400	S-H 5000	400	6
Wilcox Drillers	5	dsl	700	Beth S45E	500	8.5
	7	dsl	300	Beth S40A		8
DE SOTO						
Rogers Drlg	2	dsl	500	S-H 7000	650	9.3
EAST BATON ROUGE						
Helmerich & Payne	73	d-e	3935	Olwl 3000M	3400	30
JFP Well Serv	4	dsl	2000	Olwl E2000	2000	25
Loffland Bros	21	d-e	3200	MC U1220EBD	2500	30
	114	d-e	3300	MC U1220EBD	3300	30
	116	d-e	3300	MC U1220EBD	3300	30
Parker Drlg	174	dsl	3000	OIME Hercules 3000E	3000	30
Penrod Drlg	4	dsl	3425	Emsco C3	2200	30
	5	d-e	3425	Emsco C3	2200	30
EAST FELICIANA						
Goldrus Drlg	6	d-e	3400	Olwl E2000	1700	20
EVANGELINE						
Murco Drlg	50	d-s	2200	Olwl 860E	2000	18
Wilson Bros Drlg	10	dsl	2200	Nat 110	2100	20
FRANKLIN						
Energy Drlg	1	dsl	400	Beth S45A	500	9
IBERIA						
CRC Mallard Well	11	dsl	800	Wils 90	800	11
Parker Drlg	180	dsl	3000	OIME Hercules 3000E	3000	30
Power Rig Drlg	20	dsl	1850	Idco E900	900	13
Resource Drlg	RD17	dsl	1560	Nat 80B	1835	14
Wilson Bros Drlg	7	dsl	1400	Nat 80B	1400	12.5
IBERVILLE						
Bailey Drlg	1	dsl	1500	S/B N75	850	12
Goldrus Drlg	7	dsl	1750	S/B N95	1560	16
Resource Drlg	RD7	dsl	1560	Nat 80B	1835	14
JACKSON						
Dual Drlg	11	dsl	1850	Olwl 860	1400	18
Sawyer Drlg & Serv	5	dsl	1500	S/B N75	1500	13
	7	gas	900	Idco 750	900	13
	13	dsl	400	Wils Giant	400	9
JEFFERSON						
Goldrus Drlg	22	dsl	1250	Cbot 1000	872	13.5
NL Well Serv	298	dsl				
JEFFERSON DAVIS						
American Well Serv & Drlg	15	dsl	1700	S/B DH14610	900	12
Grey Wolf Drlg	9	d-e	3000	Emsco CZ11	2000	25
Power Rig Drlg	21	dsl	3500	Emsco C2	2000	25
Richards Drlg Assocs	10	d-e	3400	Olwl E3000	3000	30
Woolf & Magee	4	dsl	850	Idco H35	500	10
LA SALLE						
D & D Drlg	3	dsl	875	S/B N45	530	8.5
Justiss Oil	37	dsl	200	J-M500	225	5
	39	dsl	300	J-M 6500	400	6.5
LAFAYETTE						
Butler-Johnson	11	d-e	2000	Nat 110UE	2000	20
Grey Wolf Drlg	11	dsl		Olwl 86	2000	18
JFP Well Serv	6	dsl	2000	Olwl E2000	2000	25
M G F Drlg-Lafayette	41	dsl	1600	Olwl 96	1600	15
	42	dsl	1500	Olwl 96	1500	16
	44	dsl	2000	MC U914	1500	18
	401	d-e	1600	Nat 320UE	2000	25
Nicor Drlg	63	dsl	2650	Olwl 96	1500	18
Penrod Drlg	11	dsl	2600	Nat 1320M	3425	25
	14	dsl	3075	S/B N12A	1840	20
	17	dsl	2600	Nat 1320M	3425	25
	27	dsl	2600	Emsco C2	2000	25
Power Rig Drlg	12	dsl	3200	Emsco A1500M	2200	30
	19	dsl	3000	Emsco C3	3300	30
Williams Drlg	1	d-e	3200	G-D 1500	2000	25
	2	d-e	3200	G-D 1500	2000	25
LAFOURCHE						
American Well Serv & Drlg	14	dsl	1700	S/B HI4610A	575	10.5
Cliffs Drlg	18	dsl	2600	Nat 110	2475	20
Goldrus Drlg	8	d-e	1750	Olwl 840E	1700	18
Grey Wolf Drlg	3	d-e	3000	Emsco ECB	2000	25
Loffland Bros	145	dsl	2955	MC U1220	2955	20
M G F Drlg-Lafayette	47	dsl	1800	Idco S711	1500	18
Nicklos Drlg	75	dsl	2000	Olwl 860M	2700	18
Power Rig Drlg	15	dsl	2350	Emsco C1 Type III	1950	16
LINCOLN						
D B Drlg	27	dsl	1500	Nat 50A	1000	11.5
Rosamond Drlg	7	dsl	1275	S/B N10	1275	12.5
Sawyer Drlg & Serv	8	gas	1100	S/B N7	1100	11.5
LIVINGSTON						
Cliffs Drlg	24	dsl	2600	Nat 1320	2475	25
Delta Drlg	25	dsl	2300	Emsco C1 Type III	2592	18
Grey Wolf Drlg	7	d-e	3000	Emsco C11	2000	25
Parker Drlg	175	dsl	3000	OIME Hercules 3000E	3000	30
Transcontinental Drlg-Jackson	93	dsl	1000	G-D 800	1000	15
NATCHITOCHES						
Murco Drlg	34	dsl	2200	Olwl N760	1350	15
Nowotny & Conley Drlg	5	dsl	3200	Emsco C3	3000	30
Penrod Drlg	28	dsl	3425	Nat 1320M	2200	25
	107	dsl	1000	Nat 80B	1760	15
Wheless Drlg	3	dsl	1800	Emsco C13	1800	18
OUACHITA						
Butler-Johnson	8	dsl	2300	G-D 1500	2200	20
Murco Drlg	2	dsl	2200	Olwl 760E	1000	15
Sawyer Drlg & Serv	3	dsl	1100	S/B N7	1100	12
POINTE COUPEE						
Cliffs Drlg	43	d-e	2600	Nat 1320UE	3300	25
Comet Drlg	18	d-s	2700	I-R 2550HL	1500	16
Delta Drlg	82	d-s	3200	Emsco C2 Type II	3456	25
Dual Drlg	28	d-e	3400	Olwl E3000	2300	30
Eljay Drlg	2	d-s	2800	Olwl E2000	2000	25
	4	d-s	3400	Olwl E3000	3000	30
Helmerich & Payne	83	d-s	2800	Olwl E2000	2000	26
Murco Drlg	46	d-s	2800	Olwl E2000	2000	30
Parker Drlg	165	dsl	3000	OIME Hercules 3000E	3000	30
Penrod Drlg	1	dsl	3425	Nat 1625M6	2200	30
	122	dsl	1300	Nat 1625M	2000	25
RAPIDES						
Rebel Rig #3 Ltd	3	dsl	500	Idco H30	400	9
RAPIDS						
Justiss Oil	10	dsl	500	S/B N45	600	10
RICHLAND						
Justiss Oil	8	dsl	450	Emsco GA500	900	11
ST BERNARD						
CRC Mallard Well	18	dsl	1300	Wils 90	800	14.5
	20	dsl	1300	Wils 90	800	14.5
Nicklos Drlg	32PB	d-e	3400	Olwl E2000	2000	25
Wilson Bros Drlg	9	dsl	2600	Nat 110	2700	20
ST CHARLES						
Goldrus Drlg	10	dsl	1250	Beth MA810	1176	13
ST HELENA						
Transcontinental Drlg-Jackson	14					
ST JAMES						
Delta Drlg	65	dsl	2300	Emsco C1 Type III	2592	18
Dual Drlg	21	dsl	2250	Emsco C1	1600	22
Nicor Drlg	32	d-e	2700	MC 1220EB	2000	25
Power Rig Drlg	9	dsl	1850	Emsco D3	1450	14
ST LANDRY						
Goldrus Drlg	1	d-e	2000	Olwl E3000	3000	30
Nicklos Drlg	77	d-e	1600	Emsco C1II	1530	16
	79	d-e				
	80	d-s	4600	Emsco C3	3000	30
ST MARTIN						
Bailey Drlg	4	dsl	2900	Nat 1320M	3000	20
CRC Mallard Well	12	dsl	800	Wils 90	800	11
Goldrus Drlg	9	dsl	1750	Beth M810	1560	16
Nicklos Drlg	78	dsl	1400	Nat 80B	1080	14
	35PB	d-e	3400	Olwl E2000	2000	25
Nicor Drlg	76	d-m	1700	Nat 75	750	15
	78	d-m	2650	Nat 100	750	14
Power Rig Drlg	10	dsl	2600	Emsco A1500	1450	30
ST MARY						
Cliffs Drlg	30	dsl	2600	Nat 1320	2475	25
Goldrus Drlg	20	dsl	1950	Cbot 1200	1054	15
Grey Wolf Drlg	6	d-e	3000	Emsco C11	2000	25
Loffland Bros	103	d-e	3300	MC U1220EBD	3300	30
Power Rig Drlg	24	d-e	3300	Emsco C3	3000	40
TENSAS						
New Drlg, David	7	dsl	400	MC U34	450	7
TERREBONNE						
Bay Drlg	1	dsl	3600	Nat 1320M	3600	25/ 5"
CRC Mallard Well	14	dsl	1300	Wils 90	800	14.5
Nicor Drlg	202	d-e	2600	Nat 1320UE	2000	25
Penrod Drlg	29	dsl	3425	Nat 1320M	2200	25
Power Rig Drlg	11	dsl	2700	Emsco C1	2000	25
UNION						
D B Drlg	10	dsl	720	S/B N4	450	8

LOUISIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
VERMILION						
CRC Mallard Well	17	dsl	1300	Wils 90	800	14.5
Delta Drlg	16	dsl	2600	Nat 130	2250	25
Glendel Drlg	5	d-e	2000	G-D 1100E	2000	1.8
	6	d-e	2000	G-D 1100E	2000	1.8
Goldrus Drlg	15	dsl	1740	Beth M810	1560	16
Great Southern Oil & Gas	37	dsl	1000	Idco	636	10
Grey Wolf Drlg	2	d-e	3000	Emsco C11	2000	25

NICOR Drilling Company
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• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Nicor Drlg	34	d-e	2600	MC U914EC	1500	21
	67	d-e	1700	Olwl 66OE	700	15
	72	dsl	2600	Nat 1320M	2000	25
	74	d-m	2900	Nat 1320M	2000	25
	201	d-e	2600	Nat 1320UE	2000	25
Resource Drlg	RD-30	dsl	3105	Nat 1625	3740	30
	RD1	dsl	3105	Nat 1320	3740	25
	RD11	dsl	3105	Nat 1625	3740	30
Santa Fe Drlg	120	d-e	3400	Emsco C311E	3000	25
Tesoro Drlg	6	dsl	2600	Nat 1625M	2742	30
VERMILLION						
Comet Drlg	8	dsl	1700	Cbot 1200	1200	13.5
Delta Drlg	76	d-s	3200	G-D 3000RE	4600	30
Wilson Bros Drlg	4	dsl	2600	Nat 110	2700	20
VERNON						
Resource Drlg	RD12	dsl	3105	Nat 1625	3740	30
WASHINGTON						
Chesley Pruet Drlg	6	d-e	2000	Emsco D3	1000	16
WEBSTER						
Butler-Johnson	1	dsl	1900	S/B N85	1900	15
	4	dsl	1200	S/B N75	1200	12.5
	10	dsl	1500	G-D M800	1500	14
	13	dsl	1200	S/B N75B	1200	13
D B Drlg	21	dsl	750	S/B N4	450	80
H & S Drlg	1	dsl	1700	S/B N95	2145	14
Wheless Drlg	10	dsl	1800	Emsco C13	1800	16
WEST BATON ROUGE						
Delta Drlg	47	dsl	2300	Nat 130	2250	20
Dual Drlg	9	dsl	2700	Nat 1320M	2000	25
Wilson Bros Drlg	14	dsl	2600	Nat 110	2700	20
WEST FELICIANA						
Loffland Bros	115	d-e	3300	MC U1220EBD	3300	30
WINN						
Grace France Drlg	8	dsl	2400	Olwl 760E	2400	17

MICHIGAN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Cardinal Drlg	21	dsl	1000	Emsco GC500	1000	12.5
BAY						
Bigard Drlg	11	d-e	2000	Idco ED1200	2000	20
CRAWFORD						
Bigard Drlg	3	dsl	1100	Cbot 550	550	7.5
GRAND TRAVERSE						
Cactus Drlg	17	dsl	1000	S/B N55	850	11
	21	dsl	1000	Beth M58	850	12
L & G Drlg	1	dsl	398	Idco H35	398	5
	3	dsl	500	Emsco GB350	600	10

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• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Nicor Drlg	21	dsl	800	Idco H35	400	7
Provins Drlg, T D	3	dsl	1200	Idco 1000	900	10
	8	dsl	1200	Idco H1000	1000	12
	9	dsl	2100	Cbot 2550HL	1800	20
HILLSDALE						
Bigard Drlg	8	dsl	1100	Idco H44	600	8.5
Scott Drlg, Don	5	dsl	950	Idco H1000	900	10

MICHIGAN (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
JACKSON						
Bigard Drlg	7	dsl	900	Idco H37	535	7.5
KALKASKA						
Bigard Drlg	17	dsl	1100	Wils 75	900	12
Cactus Drlg	16	dsl	950	Nat 50A	850	10
	28	dsl	950	Nat 50A	850	10
Nicor Drlg	24	dsl	1185	Idco H525	850	9
Provins Drlg, T D	5	dsl	1200	Idco 1000	1000	12
	6	dsl	1125	Idco 700	700	9
	7	dsl	1200	Idco H1000	1000	12
LIVINGSTON						
L & G Drlg	2	dsl	500	Wils 65	600	8

MICHIGAN (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
MANISTEE						
Bigard Drlg	15	dsl	1100	Idco H1000	1000	12
Escor	4	dsl	500	Idco DI7015	600	7.5
Nicor Drlg	22	dsl	870	Idco H35	400	7.5
	52	d-m	600	S/B DH14210	550	8.4
	53	d-m	750	S/B DH14210	550	8.4
Provins Drlg, T D	4	dsl	1000	Coop 550	500	8
	10	dsl	1200	Idco H1000	1000	12
MASON						
Bigard Drlg	16	dsl	950	Idco H44	600	8.5
Miller Expl	3	dsl	750	OIME SL5	1000	16

SUPER FLAKE®

ANHYDROUS CALCIUM CHLORIDE

The best choice for your drilling mud applications.

Saves time! Studies have shown that SUPER FLAKE® anhydrous calcium chloride dissolves twice as fast as pellets.

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Saves money! SUPER FLAKE anhydrous calcium chloride won't get shaken out of the shale shaker, which means less product loss at the rig site.

High purity! SUPER FLAKE is 94% pure anhydrous calcium chloride and manufactured to meet Allied's demanding quality specifications.

When you compare the performance of Allied's SUPER FLAKE anhydrous calcium chloride with that of the pellet, there is no comparison. Yet when it comes to purity and assay, there's no difference!

Faster dissolving. Better mud density control. SUPER FLAKE anhydrous calcium chloride from Allied is the superior calcium chloride for your drilling muds that saves time and money. Ask for it by name, or call Allied Corporation, Manager, Calcium Chloride, 201/455-3703.

ALLIED Chemicals

Circle 227 on Reader Service Card

MICHIGAN (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
NEWAYGO						
Bigard Drlg	14	dsl	1100	Idco H1000	1000	12
OSCODA						
Bigard Drlg	12	d-e	2000	Idco ED1200	2000	20
OTSEGO						
Bigard Drlg	10	dsl	1200	Idco H44	600	8.5
Provins Drlg, T D	2	dsl	1200	Idco H37	456	8
ST CLAIR						
Bigard Drlg	9	dsl	1100	Idco H44	600	8.5
WASHTENAW						
Escor	5	dsl	949	Idco H35	445	5.5
WEXFORD						
Cactus Drlg	12	dsl	1000	Olwl 66	850	10

MISSISSIPPI

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Chesley Pruet Drlg	2	dsl	1800	Emsco GB500	1200	14
	12	dsl	3600	Emsco C2	3600	25
	15	dsl	4800	Emsco C3	4300	30
Harris Well Serv	30	dsl	2000	Idco 1200	1400	13.5
Justiss Oil	7	dsl	1800	Emsco J1400	2900	20
	16	dsl	600	Emsco GB	900	12
	22	dsl	1800	Nat 80B	1420	14
	23	dsl	1800	Emsco J1100	2400	20
	24	dsl	3600	Emsco J1400	3000	22
	26	dsl	940	Emsco GB500	940	12
	34	g-b	700	Beth M58	1000	12
	35	dsl	1250	Emsco J1400	1200	18
Par-Co Drlg	1	dsl	300	Idco H30	300	6
	3	dsl	700	S-H 7000	500	7
	4	dsl	700	Wils 42	500	8
Wilcox Drillers	6	dsl	1100	Emsco 550	800	12.5
ADAMS						
D & D Drlg	1	dsl	700	S/B N4A	350	8
New Drlg, David	3	dsl	400	S-H 6000	400	6
	9	dsl	400	S-H 5000	400	5
	15	dsl	1000	Idco 900	1650	16
Rebel Rig #3 Ltd	2	dsl	350	Beth S455	350	8
CHICKASAW						
Transcontinental Drlg-Jackson	12					
CLAIBORNE						
Murco Drlg	26	dsl	2800	Olwl N2000-B	3000	30
CLARK						
Tesoro Drlg	7	dsl	2000	Nat 80B	1650	15
CLARKE						
Chesley Pruet Drlg	4	d-e	4000	Emsco C1	2000	25
Helmerich & Payne	72	dsl	2835	Olwl 3000M	2835	30
	77	d-e	2200	Nat 110UE	2430	18
FORREST						
Tesoro Drlg	1	dsl	2600	Nat 1320M	2742	25
HANCOCK						
Marion Drlg	5	dsl	2400	Olwl M2000	2400	25
Murco Drlg	10	dsl	2200	S/B N95	2400	20
Penrod Drlg	10	dsl	2600	Nat 1320M	3425	25
	112	dsl	1600	Nat 1625M	3000	30
HINDS						
Delta Drlg	56	dsl	2600	Wils Super 250	2592	25
Exeter Drlg Southern	32	dsl	2800	G-D 1500	2800	25
Murco Drlg	54	d-s		G-D 1100E		18
Quarles Drlg	14	dsl	2700	MC U914C	2400	22
JEFFERSON DAVIS						
Murco Drlg	22	dsl	2400	S/B N95	2400	20
JONES						
Chesley Pruet Drlg	3	d-e	4000	G-D 1500E	2000	25
	16	dsl	3600	Emsco C2	3600	30
Grace France Drlg	5	el	2400	Olwl 760E	2400	17
Marion Drlg	4	dsl	2400	Emsco C2	2400	25
New Drlg, David	12	dsl	500	Beth	800	12
	14	dsl	2000	Emsco C2	2700	25
Penrod Drlg	24	dsl	2600	S/B N12A	1950	25
Tesoro Drlg	8	dsl	3200	Nat 1320	3600	30
Transcontinental Drlg-Jackson	18					
	84					
	85					
LAMAR						
Marion Drlg	1	dsl	1800	Emsco M610	1800	18

MISSISSIPPI (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
LAWRENCE						
Transcontinental Drlg-Jackson	92					
MARION						
Marion Drlg	2	dsl	2400	Emsco C1	2400	20
MONROE						
Chesley Pruet Drlg	5	dsl	950	Nat 370	950	12
PEARL RIVER						
Delta Drlg	96	d-e	2600	Emsco C1 Type II	3456	20
Helmerich & Payne	75	dsl	3300	Nat 1625M	3645	30
RANKIN						
Helmerich & Payne	71	dsl	1830	Nat 1320M	1830	23
SCOTT						
Nicor Drlg	15	dsl	2100	Olwl 76	1000	15
SIMPSON						
Exeter Drlg Southern	16	dsl	2600	G-D 1500	2600	25
Helmerich & Payne	74	dsl	3300	Olwl	3695	30
	86	d-s	4250	Nat 1625DE	4250	30
SMITH						
New Drlg, David	8	dsl	1500	Nat 80B	1500	14
	10	dsl	500	Emsco GB500	800	12
SUNFLOWER						
New Drlg, David	11	dsl	500	Emsco GB500	800	12
WALTHALL						
Penrod Drlg	2	dsl	2600	Emsco C2	3425	25
WARREN						
Marion Drlg	6	dsl	3300	Emsco C3	3300	30
Penrod Drlg	12	dsl	3850	G-D 1500	2120	20
WAYNE						
Exeter Drlg Southern	26	dsl	2500	Nat 95	2500	17.5
Noble Drlg	E1102	dsl	1870	Emsco A1100	1870	18
WILKINSON						
Energy Drlg	2	dsl	535	Idco H35S	540	9.5
	3	dsl	2000	Emsco D3	2000	18
Helmerich & Payne	41	dsl	1650	Nat 110	1815	22
Penrod Drlg	120	dsl	1600	Nat 1625M	3000	30
Transcontinental Drlg-Jackson	91					

MONTANA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Cardinal Drlg	1	dsl	864	BDW 800	1140	14
Comanche Drlg Co	2	dsl	430	Idco H30	400	5
	5	dsl	430	Idco H30	400	5
K B Drlg	2	dsl	278	Crdw AH-91	185	5
Noble Drlg	814	dsl	1606	Nat 80B	1606	15
BIG HORN						
Westburne Drlg	72	dsl	720	Nat T32	360	7.5
BLAINE						
K B Drlg	1	dsl	278	Crdw A150A	185	4.5
CARBON						
Anderson-Myers Drlg	11	dsl	1200	Nat 55	1200	13
Manning, R L	15	dsl	700	Nat 55	700	11
DANIELS						
Nicor Drlg	26	dsl	1100	Nat 50A	425	11.5
DAWSON						
Grace-Bomac Drlg	46	dsl	1125	Nat 610M	1125	12.5
True Drlg	22	dsl	1200	Nat 55	1200	13
FALLON						
Atco Drlg	17	d-e	1200	Nat 610E	120	12
Cliffs Drlg	6	dsl	1600	Nat 610	1100	12.5

SPARTAN
DRILLING
(713) 955-0625 (409) 775-7071
(303) 293-8006 (406) 482-6470
(403) 262-7778

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Spartan Drlg	11	d-m	600	Sup 700	700	11
	19	d-m	600	Sup 700	700	11
	26	d-e	700	Idco 725E	1000	10

MONTANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
FLATHEAD						
Parker Drlg	166	d-e	3000	O/ME 3000E	3000	30
GLACIER						
Anderson-Myers Drlg	8	dsl	1800	Nat 80	1800	16
Simmons Drlg	31	dsl	350	S-H 6000	350	6.5
HILL						
Elenburg Expl	5	dsl	320	W-N CC2000	180	2.5
LEWIS & CLARK						
Cardinal Drlg	16e	d-e	2000	Emsco D3	2000	18
	17e	d-e	2000	Emsco D3	2000	18
MC CONE						
Anderson-Myers Drlg	3	dsl	1200	Emsco G500	1200	11
MUSSELSHELL						
Elenburg Expl	10	dsl	320	Elenburg	430	6
Simmons Drlg	41	dsl	350	Hycalog HH6000	350	6.8
Soape Drlg	1	dsl	950	Nat 45	950	7.5
PARK						
Westburne Drlg	70	dsl	700	Nat 50A	700	10
PETROLEUM						
Anderson-Myers Drlg	4	dsl	1200	Emsco GA500	1200	11
Simmons Drlg	47	dsl	350	Troy M600	350	7.5
PHILLIPS						
Elenburg Expl	8	dsl	320	W-N CC2000	230	2.5
PONDERA						
Alkins Drlg	2	dsl	200	B-E	200	3
POWELL						
Molen Drlg	5	dsl	1200	S/B N46	800	12
RICHLAND						
Atco Drlg	58	d-e	1800	Nat 80UE	1800	16
Burris Drlg	103	dsl	1000	G-D 700	1000	14.5
Enopco	2	dsl	1600	Nat 510	2100	14
Noble Drlg	N-84	dsl	1320	Nat 80B	1320	15
Spartan Drlg	25	d-e	700	Idco 725E	1000	10
ROOSEVELT						
Cardinal Drlg	22	dsl	1554	Nat 80B	1554	15
Challenger Drlg	31	dsl	1200	S/B N75	1200	12
Drilcon	1	dsl	1125	Beth 450	1125	11
Grace-Bomac Drlg	42	dsl	1000	G-D 700M	1000	12.5
	55	dsl	1500	G-D 800M	1500	16
Nicor Drlg	16	dsl	1550	Olwl 76	1000	15
ROSEBUD						
Molen Drlg	1	dsl	400	Emsco GB250T	350	6.5
SHERIDAN						
Grace-Bomac Drlg	54	dsl	1125	Nat 610M	1125	12.5
Noble Drlg	N-610	dsl	1606	Nat 80B	1606	15
	N-89	dsl	800	Nat 80B	800	13
TETON						
Molen Drlg	4	dsl	1350	S/B N75A	1350	15
TOOLE						
Comanche Drlg Co	1	dsl	430	Idco H30	400	5
Elenburg Expl	2	dsl	320	W-N CC2000	230	2.5
VALLEY						
Blocker Drlg	20					9
Burris Drlg	115	dsl	1200	Sup 700	650	100
	118	dsl	850	MAC 400	500	10.5
Challenger Drlg	1	dsl	900	Emsco BC500	1000	11
	24	dsl	500	S/B N4A	650	6.5
Drilcon	5	dsl	715	Idco H725	700	11
Helmerich & Payne	53	d-e	1200	Idco H525	800	12

SPARTAN
DRILLING
(713) 955-0625 (409) 775-7071
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• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Spartan Drlg	29	dsl	500	Idco H525	500	8.5
	30	dsl	500	Idco H525	500	8.5
Westburne Drlg	59	dsl	1100	Idco M750D	800	10
WIBAUX						
Dbilyn-Field Drlg	37	dsl	1600	Nat 80UE	2000	15

NEBRASKA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Stoeppelwerth Drlg	2	dsl	375	Emsco 250	375	4.5
CHEYENNE						
Exeter Drlg Northern	13	dsl	350	S/B N4	300	6
DUNDY						
Murfin Drlg	20	dsl	525	Nat 370	600	7.5
HITCHCOCK						
Murfin Drlg	24	dsl	525	Idco H35SC	475	6.5
MOXA Drlg	1	dsl	540	Idco 35	380	7
Rains & Williamson Oil	1	dsl	525	Beth S45-B	450	5.5
Stoeppelwerth Drlg	3	dsl	500	Nat 370	500	6.5
MORRILL						
Banner Drlg	4	dsl	400	Apache 25040	375	5
RED WILLOW						
Murfin Drlg	7	dsl	525	Nat T32	400	6
RICHARDSON						
Brandt Drlg	1	dsl	350	Beth S50	450	5
SIOUX						
Banner Drlg	3	dsl	500	Nat T45	800	9.5

NEVADA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Continental Drlg	17	d-e	2600	Idco E1700	1700	19
CHURCHILL						
Veco Drlg	7	dsl	1550	OIME 1000	1000	16
ELKO						
Anderson-Myers Drlg	17	dsl	2300	Nat 110	2300	22
Penrod Drlg	20	dsl	2600	Nat 1320M	1950	25
ESMERALDA						
Willbros Drlg	10	d-s	3000	Idco E1700	3000	25
EUREKA						
Brinkerhoff-Signal	3	dsl	1000	Nat 55	1000	12
NYE						
Brinkerhoff-Signal	9	dsl	550	S/B N45	600	7.5
Cardinal Drlg	2	dsl	864	Emsco GA500	780	10
Loffland Bros	211	dsl	1260	MC U15	1000	10

NEW JERSEY

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
SUSSEX						
New Jersey Drlg	T5	dsl	400	I-R	400	5

NEW MEXICO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Arapahoe Drlg	6	dsl	300	Nat T32	350	8
Ard Drlg	5	dsl	1986	MC U20	1800	15
	6	dsl	1200	MC U15	1200	11.5
	7	dsl	1200	MC U40	1200	14
LLL Drlg	2	dsl	1720	Cbot 750	880	10
Stewart Bros Drlg	45	dsl	324	Fail 2500	324	3
	51	dsl	324	Fail 2500	324	3
	52	dsl	324	G-D 15W	324	1.5
	53	dsl	324	G-D 15W	324	1.5
	54	dsl	1000	Fail 100	450	5
CHAVES						
Artesia Fishing Tool	2	dsl	500	G-D	500	6
Basin Drlg	14	dsl	1470	G-D 700M	1220	14
Exeter Drlg Northern	64	dsl	1035	Unit U15	750	9.5
L & M Drlg	1	dsl	750	G42	440	7.5
Willbros Drlg	3	dsl	800	MC U15	800	11
Young Drlg	4	dsl	400	Crdw K500	600	8.5
DONA ANA						
Bayless Drlg	7	dsl	1500	G-D GD700	1200	14
EDDY						
Artesia Fishing Tool	1	dsl	400	May 3000	200	4
Cactus Drlg	63	dsl	550	S/B N4	454	6
	73	dsl	300	MC U34	454	6.5

NEW MEXICO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
EDDY (Cont'd)						
Dual Drlg	37	dsl	1600	Oiwl 500	700	10
Kenai Drlg	21	dsl	1350	MC U20	1400	15
	37	dsl	1750	Nat 100M	1500	18
L & M Drlg	2	dsl	750	G-D 3000	380	6
La Rue Drlg	1	dsl	650	Nat T20	500	7
	2	dsl	500	G-D 3000	500	6
Landis Drlg	4	dsl	800	S/B N45	700	10
Loffland Bros	37	d-e	2160	MC U914B	2400	20
M G F Drlg-Midland	26	dsl	1725	G-D 1100	1725	19
McVay Drlg	4	dsl	850	Nat 75	850	12
	10	dsl	1300	Nat 100	1300	16
Parker Drlg	34	gas	1000	Nat 75	1000	16
	161	gas	1000	Nat 75	1000	16
Rio Colorado Drlg	120		1300	S/B N95A	1700	16
Sharp Drlg	35	dsl	2331	Beth 1013	2742	23
	36	dsl	2331	Beth MC950	2742	22
Sierra Drlg Co	5	dsl	500	Weis W45	400	7.5
Sterling Drlg	20	dsl	1260	Nat 610	840	13
TMBR Drlg	1	dsl	350	MC U15CA	500	6
W E K Drlg	1	dsl	770	MC U34	380	7.5
	2	dsl	1200	Idco H35	460	12
Wilson Bros Drlg	21	dsl	800	Nat 80B	1425	16
HARDING						
Aztec Well Serv	56	dsl	400	Wils Mogul	350	6
LEA						
Basin Drlg	5	dsl	900	Emsco D2-M	820	13
Cactus Drlg	8	dsl	900	S/B N7	1200	11
	19	dsl	550	Nat T32	850	8
	23	dsl	2000	Nat 110	2550	20
	27	dsl	2200	S/B N20	2550	25
	52	dsl	550	Idco H35	454	6.5
	71	dsl	900	Emsco U36A	916	10
Cliffs Drlg	38	d-e	2800	Oiwl 840E	3300	18
Delta Drlg	3	dsl	2300	Emsco C1 Type III	2331	18
	60	d-e	1825	Emsco D3 Type II	2502	16
Exeter Drlg Northern	65	dsl	1300	Emsco D2	1100	13
	66	dsl	1100	BDW 650	750	11
	67	dsl	1300	Emsco D2	1100	13
Hondo Drlg	3	dsl	800	Beth M58C	800	13.5
	4	dsl	1200	S/B N75	1200	14
	5	dsl	800	Nat 55C	800	13.5
	7	gas	750	S/B N55	750	11.5
	12	dsl	1200	G-D 800	1200	15
Kenai Drlg	11	dsl	400	Nat T20	400	6.5
	22	dsl	700	Emsco J1100	1400	15
	23	dsl	1800	Emsco JB1250	1400	15
	36	dsl	650	Wils Giant	800	9
M G F Drlg-Midland	11	dsl	900	Beth M58	900	12.5
McVay Drlg	7	dsl	1200	Nat 75CA	1200	13
	8	gas	1200	Nat 80B	1200	15
	9	dsl	1400	Nat 110	1400	18
Moranco	1	dsl	1100	OIME 1000SL	1000	15
	2	dsl	1100	Emsco GB800	1000	15
	3	dsl	1100	MC 712A	1000	15
	5	dsl	750	MC U15	750	11
	6	dsl	750	S/B N75	750	12
	7	dsl	1100	S/B N75	1000	15
	9	dsl	750	S/B N55	750	11
	10	dsl	1100	MC	750	11
Norton Drlg	12	dsl	550	Wils 75	900	11.5
Parker Drlg	38	gas	1200	Nat 100M	1200	18
	65	gas	1600	Nat 100M	1600	23
	85	gas	1600	Nat 130	1600	23
	90	gas	1800	Nat 130	1800	25
	198	gas	1600	OIME 1500C	1600	22
	211	gas	1000	Nat 75	1000	16
Quarles Drlg	2	dsl	1500	OIME 1000	1000	18
	15	dsl	2000	RMI 1000	1000	15
Resource Drlg	RD6	dsl	2330	Nat 110	2740	18
Rio Colorado Drlg	140	dsl	1200	Nat T45	900	10.5
	142	dsl	1625	Nat 110	1650	18
Rod Ric	10	dsl	670	Emsco G500	600	8.5
Sharp Drlg	369	d-e	1488	MC U712EC	1965	18
Sierra Drlg Co	3	dsl	500	Emsco D2	1000	13
Tri-Service Drlg	2	dsl	1400	Oiwl 66	900	10
TMBR Drlg	26	dsl	700	G-D 500	700	11
Verna Corp	16	dsl	600	S/B N14	450	6.5
Willbros Drlg	1	dsl	1200	Oiwl 76	1200	14
	4	dsl	1700	Nat 55	1260	14
	5	gas	1100	Beth 450	1100	13
Wilson Bros Drlg	19	dsl	800	Nat 80B	1425	16
LEE						
Landis Drlg	2	dsl	1000	S/B N75	1350	14
MORA						
Sharp Drlg	48	dsl	790	Beth M58	988	13.5
RIO ARRIBA						
Arapahoe Drlg	7	g-b	700	Nat T45	700	10
	10	g-b	700	Nat 50A	500	12
	11	g-b	300	Nat T32	320	9

NEW MEXICO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
RIO ARRIBA (Cont'd)						
Aztec Well Serv	222	dsl	750	Wils M75	1100	12
	289	dsl	600	Crdw KB500	750	8.5
Four Corners Drlg	2	dsl	1500	Crdw KB500	700	8
	4	dsl	1500	Crdw KB500	700	8
	5	dsl	1500	Crdw KB500	700	8
	6	dsl	1500	Crdw KB500	700	8
	10	dsl	1500	Crdw	750	8
	11	dsl	1500	Crdw KB500	636	8
Nicor Drlg	41	dsl	2000	G-D 1100M	1500	21
ROOSEVELT						
Norton Drlg	5	dsl	550	Wils 75	850	10.5
SAN JUAN						
Aztec Well Serv	171	dsl	600	Wils M75	700	8
	301	dsl	1000	Crdw KB500	1000	8.5
Bayless Drlg	5	dsl	1500	Coop LTO550	550	8.5
Four Corners Drlg	7	dsl	1500	Crdw KB500	750	8
	8	dsl	1500	Crdw KB500	750	8
	12	dsl	1500	Crdw KB500	636	8
True Drlg	4	dsl	450	Emsco GA250T	500	6.5
	27	dsl	900	Idco H725SC	900	10
Young Drlg	3	dsl	400	Wils 75	600	8.5
	5	dsl	750	Crdw K500	600	8
SAN MIGUEL						
Baker & Taylor Drlg	19	dsl	870	MC U15	870	11
SANDOVAL						
Brinkerhoff-Signal	78	dsl	1600	Nat 610	1100	12.5
Four Corners Drlg	9	dsl	1500	Crdw KB500	750	8
Young Drlg	2	dsl	600	Idco DIR701	600	8.5
TRAVIS						
W E K Drlg	3	dsl	450	Emsco T45E	440	6.5
UNION						
Baker & Taylor Drlg	16					

NEW YORK

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CATTARAGUS						
International Petr Serv	9	dsl	475	Chal Model 320HD	360	4.5
CHATAUQUA						
Underwater Gas Dev	8			S/B	400	8.5
CHAUTAUQUA						
International Petr Serv	7	dsl	475	Chal 320	360	4
Underwater Gas Dev	3			Chal 320	300	6
	4			Challenger 320	300	6
STUBEN						
International Petr Serv	4	dsl	475	Wils 42	475	7.5
WYOMING						
Delta Drlg	78	dsl	255	Idco H35KD	291	6

NORTH DAKOTA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Cardinal Drlg	7	dsl	1120	Emsco GB500	864	10.5
	10	dsl	1296	Emsco GB800	1296	13.5
	34	dsl	400	Emsco GB160	400	4.5
KCA Drlg	C3	dsl	1200	Nat 80B	1200	12
Noble Drlg	OW-861	dsl	2400	Oiwl 860	2400	18
Pruet-Ram-Co	1	d-e	2000	Emsco D3	2000	18
	2	dsl	3000	Emsco C1	3000	20
	3	dsl	1800	Emsco D2	1200	15
	5	dsl	1800	Emsco D2	1200	14
Ratliff Drlg	6	dsl	1650	Emsco GB800	1650	17
	15	dsl	1650	Nat 80B	1650	18
Westburne Drlg	63	dsl	1000	OIME SL7	1400	15
BILLINGS						
Brinkerhoff-Signal	1	dsl	1100	G-D 800	1100	13
Cardinal Drlg	11	dsl	864	BDW 800	1140	14
Drilcon	2	dsl	1176	Nat 80B	1176	14.5
Dual Drlg	3	dsl	1500	Wils 120	1650	15
Enopco	4	dsl	1600	Nat 610	2100	14
	7	dsl	2000	Nat 80B	1800	18
Forwest	3	d-s	2000	Idco 1200E	1800	16
Grace-Bomac Drlg	48	dsl	1500	G-D 800M	1500	16
	92	dsl	1000	G-D 700M	1000	12.5
Penrod Drlg	103	dsl	1760	Nat 80B	2000	20
	104		2000	Nat 80B	1760	15

NORTH DAKOTA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
BOTTINEAU						
Cardinal Drlg	8	dsl	400	Nat T20	440	5.5
BOWMAN						
Noble Drlg	E551	dsl	800	Emsco A550	800	13
	N-57	dsl	800	Nat 55	800	12
BURKE						
Cardinal Drlg	5	dsl	541	Emsco GB250	560	7.5
	35	dsl	1120	SOS 6000S	480	7.5
Grace-Bomac Drlg	21	dsl	520	Idco H35SC	260	7
Kenting Drlg	44	dsl	550	Emsco GB350	550	8.5
DIVIDE						
Dual Drlg	27	dsl	1200	Emsco D3	1000	16
Grace-Bomac Drlg	37	dsl	1000	G-D 700M	1000	12.5
	39	dsl	1000	S/B N75	1000	12.5
Kenting Drlg	3	dsl	615	Emsco 500	800	11
Nicor Drlg	40	d-e	1700	Olwl 660E	700	12
Noble Drlg	E552	dsl	800	Emsco A550	800	13
Penrod Drlg	105	dsl	1575	Nat 80B	1760	15
Westburne Drlg	61	dsl	1050	Nat 55	1320	12.5
DUNN						
Anderson-Myers Drlg	16	dsl	2300	Nat 55	1200	13
Atco Drlg	10	d-e	2000	Nat 80UE	2000	16
Brinkerhoff-Signal	74	dsl	1500	G-D GD800	1500	15
Burris Drlg	102	dsl	1000	G-D 700	1000	14.5
Grace-Bomac Drlg	36	dsl	1500	Nat 80	1500	15
	52	dsl	1500	Nat 80B	1500	16
	58	dsl	1500	Nat 80B	1500	16
GOLDEN VALLEY						
Kenting Drlg	6	dsl	1500	S/B N85	1500	15
MC KENZIE						
Blocker Drlg	1	dsl	1000	OIME 1500SL	1500	18
	2	dsl	1000	OIME 1000SL	1500	16
	4	dsl	770	OIME 750SL	1155	14
	11	dsl	1000	Nat 80B	1500	15
Brinkerhoff-Signal	10	dsl	1000	MC U40	1000	13
	65	dsl	1000	Nat 80B	1000	16
	80	dsl	1500	Nat 80B	1500	16
Burris Drlg	101	dsl	1500	G-D 1100M	1500	20
Dixilyn-Field Drlg	35	d-e	1600	Nat 80UE	2000	15
Drilcon	4	dsl	1800	Nat 110	1800	15
Dual Drlg	17	dsl	1550	Beth M58	750	12.5
Forwest	5	d-s	2000	Nat 80UE	2000	16
Grace-Bomac Drlg	30	dsl	1500	Olwl 96	1500	18
	33	dsl	1500	Olwl 96	1500	14
	40	dsl	1000	Olwl 76	1000	13
	47	dsl	1500	Nat 80B	1500	16
	49	dsl	1500	G-D 800M	1500	16
	50	dsl	1500	Nat 80B	1500	16
	51	dsl	2250	Nat 110M	2250	20
	57	dsl	1500	G-D 800M	1500	16
	60	dsl	1500	Nat 80B	1500	16
Helmerich & Payne	15	dsl	1230	Olwl 76	1365	15
Kenting Drlg	1	dsl	1500	Nat 80B	1500	15
	11	dsl	1200	MC U40	1200	14
	43	dsl	600	Emsco GA500	600	10.5
	47	dsl	800	MC 38A	800	11
	48	dsl	1400	Nat 610	1400	12.5
Nicor Drlg	27	dsl	2000	S/B N95	1500	18
Noble Drlg	N-811	dsl	1606	Nat 80B	1606	15
Shelby Drlg	54-E	d-e	1000	Nat 370ESCR	650	10
Spartan Drlg	8	d-e	1000	Sup 1000E	1000	16
True Drlg	21	dsl	1800	Nat 80B	1800	15
	23	dsl	1800	MC U712A	1800	16
Westburne Drlg	62	dsl	1050	Nat 50A	1200	11
MOUNTRAIL						
Grace-Bomac Drlg	27	dsl	1010	S/B N55	750	9.5
RENVILLE						
Cardinal Drlg	3	dsl	400	Nat T20	400	5.5
	6	dsl	560	Emsco GB250	440	6.5
	12	dsl	560	SOS 6000	480	6.5
Grace-Bomac Drlg	31	dsl	630	Beth S45E	370	8
SHERIDAN						
Kenting Drlg	2	dsl	1200	MC U40	1200	14
SLOPE						
Grace-Bomac Drlg	41	dsl	700	S/B N7	700	10
STARK						
Brinkerhoff-Signal	11	dsl	1500	Nat 80B	1500	15
Challenger Drlg	22	dsl	1400	Nat 110	1800	18
Cliffs Drlg	14	dsl	1200	Emsco J1250	900	15
Grace-Bomac Drlg	26	dsl	1010	G-D 500M	750	3.5
WARD						
Cardinal Drlg	14	dsl	560	Emsco GB350	840	8.5
WILLIAMS						
Blocker Drlg	8	dsl	770	OIME 750SL	1155	14
Brinkerhoff-Signal	77	dsl	1500	G-D 800M	1500	13.5
Cliffs Drlg	36	dsl	1700	Emsco JB1250	1650	16
Drilcon	3	dsl	784	Nat 50A	784	10
Forwest	4	d-s	2000	Idco 1200	1600	16
Grace-Bomac Drlg	25	dsl	1500	Nat 80B	1500	15
	34	dsl	1000	S/B N7	1000	10
	35	dsl	2250	Nat 110M	2250	20
	38	dsl	1000	G-D 700M	1000	12.5
Helmerich & Payne	88	dsl	1815	Olwl 860	1815	16
Kenting Drlg	14	dsl	1500	Nat 80B	1500	15
	30-E	d-e	2000	Nat 80UE	1000	15
Nicor Drlg	25	dsl	1700	Nat 125	1200	15
Noble Drlg	N-82	dsl	1200	Nat 80	1200	15
Shelby Drlg	52	dsl	1500	OIME SL7	1500	16
TMBR Drlg	21	dsl	1100	Nat 75CA	1100	13
	28	dsl	1650	G-D 800	1650	16

NICOR Drilling Company
(918) 587-5507

SPARTAN
DRILLING
(713) 955-0625 (409) 775-7071
(303) 293-8006 (406) 482-6470
(403) 262-7778

OHIO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Grim Well Serv	1	dsl	400	G-D 2000	250	30/3.5
	2	dsl	430	G-D 2000	430	20/3.5
Sheldon & Son	1	dsl	450	W-N 25040	350	6
ASHTABULA						
Armstrong Drlg	24	Air	Wils 42	400		
International Petr Serv	6	dsl	475	Wils 42	475	7.5
P E P Drlg	1	dsl	550	S/B N45	450	7.5
	2	dsl	500	Idco H35S	350	6.5
	6	dsl	550	Idco H35S	350	6.5
	7	dsl	550	Emsco WS1	470	7.5
Underwater Gas Dev	2			I-R T5	400	5
COLUMBIA						
Armstrong Drlg	27	dsl		Wils Mogul 42	280	7.5
COSHOCTON						
Armstrong Drlg	30	Air		Wils 42	700	
Mid Atlantic Oil	3	dsl	500	Wils 42	500	8.5
GEAUGA						
P E P Drlg	4	dsl	550	G-D 500	500	7
LAKE						
International Petr Serv	12	dsl	475	Chal Model 320	360	4
MEDINA						
Armstrong Drlg	12	dsl	380	May 3000	318	4
Miller Contract Drlg	21	dsl	425	S-H 6000	425	7
MEIGS						
Smith Petr, Carl E	7	dsl	320	Idco BIR5525	475	8.5
PORTAGE						
Mid Atlantic Oil	4	dsl		Idco Rmbr	325	5.6/3.5"
STARK						
Armstrong Drlg	51	Air		Wils 42	400	
SUMMIT						
Armstrong Drlg	10	dsl	380	May 3000 Port	350	4
TRUMBULL						
Armstrong Drlg	11	dsl	380	Wils Mogul 42	380	7.5
WASHINGTON						
Mid Atlantic Oil	1	dsl	400	Idco Rmbr 5525	480	7
	2	dsl	500	Idco Rmbr 5525	480	7

OKLAHOMA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Arden Drlg	1	d-e	1600	Emsco D2	1200	16
	2	dsl	800	Emsco WS1	800	12
	5	d-e	2400	Emsco D3	2000	18
	8	dsl	3400	Emsco CE3000	3000	30
Ardmore Drlg	1	dsl	450	Idco H30-D	450	5
	2	gas	700	Wils Giant	700	9
	3	gas	1350	Idco M10000	1350	12.5
	4	gas	600	Wils	400	50
	5			Idco		16.5
Astro Drlg	15	dsl	912	Wils Super Giant	912	10.5
	18	dsl	556	Idco H1000	940	12
	21	dsl	2500	Nat 100	1500	18
	28	d-e-s	2000	I-R 2550	1500	16
ACT Drlg	1	dsl	1750	G-D 6D 800	1000	16
	2	dsl	1750	Nat 125	1950	23
	3	dsl	600	Wils 42	700	10
Bighorn Drlg	1	dsl	1200	Nat 370	900	9
	3	dsl	800	Idco H37	500	6.5
	4	dsl	1000	MC U15	1000	10
	5	dsl	1200	MC U15	1000	10
Bodard & Hale Drlg	10	dsl	450	Olwl 52T	600	9
Continental Drlg	1	d-e	3200	Idco E2100	2000	25
	4	d-e	3200	Idco E2100	2000	25
	7	d-e	3200	Idco E3000	3000	30
	8	d-e	2600	Idco E1700	1700	19
	9	d-e	2000	Idco ED1200	1200	16
	10	d-e	3200	Idco E2100	2000	25
	12	d-e	2000	Idco ED1200	1200	16
	13	d-e	2000	Idco ED1200	1200	16
	15	d-e	2000	Idco ED1200	1200	16
	16	d-e	2000	Idco ED1200	1200	16
	32	d-e	2600	Idco E1700	1700	19
	34	d-e	3200	Idco E2100	2100	25
	35	d-e	2600	Idco E1700	1700	19
Cothrum Drlg	15					
	18					
	19					
Culver Drlg	2	dsl	700	Nat 50A	700	12
	5	dsl	800	G-D 800	800	16
	7	d-o	2000	G-D 1500	2000	25/5"
	8	dsl	1200	OIME SL7A	1200	18/5"
	9	dsl	1800	Nat 110	1800	18/5"
	22	dsl	800	Coop 750	800	9.5/4"
Fossil Drlg	1	dsl	1150	Emsco GB350	800	10
	2	dsl	1350	G-D 500M	900	12
	4	dsl	1300	MC U15	900	12.5
Noble Drlg	GD2	dsl	3135	G-D 2100	3135	25
	OW-23	e-s	3750	Olwl E2000	2000	25
	OW-842	e-s	2000	Olwl 840	2775	20
Plotner Drlg	2	dsl	1000		2000	20
Quanza Drlg	1	dsl	300	Nat 300B	300	5.5
	2	dsl	250	S/B N4	450	4.5
Ratliff Drlg	14	dsl	2640	MC U1220B	2640	28
	20	dsl	3600	UIZZOEB	2500	30
Roberson Drlg	1	gas	600	Emsco	400	7
	3	gas	700	MC U15	600	10
Rockwell Drlg	18	dsl	670	MC U34	450	5
	20	dsl	670	MAC 350	550	6.5
	22	dsl	670	Emsco G36	450	7
	24	dsl	450	MAC 300	450	5
Royal Drlg	1	dsl	300	Emsco GB160	675	4.2
Sandia Drlg	1	dsl	3000	G-D E800	3000	18
	2	dsl	4000	Emsco C1	4000	22
	3	dsl	3000	Emsco D3	3000	18
	4	dsl	4000	Emsco C1	4000	22
	5	dsl	2000	Emsco D2	[illegible]	16
Scott Drlg, Jerry	4	dsl	600	Beth C50	640	10
T E K Drlg	F1500	gas	350	Fail 1500	350	1.5
	WS	dsl	265	Wils Super	265	4.5
Tri-Land Drlg	1	dsl	1500	G-D 1500E	2000	21
TWT Expl	54	dsl				10
Unit Drlg & Expl	5	dsl	600	MC U15	600	12
	26	gas	600	Nat 75	600	15
	27	dsl	1600	G-D 1500	2400	25
	30	dsl	2350	Beth 1350M	1800	20
Vaughn Good Drlg	3	dsl	500	Coop 600	500	9
Vi-Roi Drlg	1	dsl	435	Wils Mogul 42	435	6.5
	2	dsl	120	HT 100	210	3
Warren Interstate Drlg	1	dsl	1000	Cbot 2042TDHT	700	10.7
ALFALFA						
Hughes Drlg	7	dsl	550	Idco H37	450	8
Thomas Drlg	2	dsl	300	Nat T32	300	7.3
ATOKA						
FWA Drlg	10	dsl	1150	Wils Giant	720	11.5
BEAVER						
Beredco	1	dsl	800	MC U15	800	9
Bravo Drlg	2	dsl	870	BDW 800	870	14
Drillers	23	dsl	600	MC U15	600	10
Eagle Drlg	2	dsl	1000	Nat T45	725	9.5
Rine Drlg	4	gas	750	S/B N75	750	12

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
BEAVER (Cont'd)						
Slawson Drlg	5	dsl	360	Idco H525	480	7.5
Triad Drlg	1	dsl		Nat T32	475	8
Unit Drlg & Expl	4	dsl	500	MC U15	800	11
Westwood Drlg Co	17	dsl	600	G-D 500	650	9
Zenith Drlg	8	dsl	400	Emsco 350	400	9
BECKHAM						
Arden Drlg	3	dsl	2500	Emsco C1	1500	20
	9	d-e	2000	Emsco D2	1000	14
Atco Drlg Southern	14	d-e	3200	Nat 1320E	2000	22
Big Chief Drlg	45	dsl	1500	S/B N95A	2250	18
Challenger Drlg	7-E	dsl	900	Nat 80E	1000	14
Grace/T R G Drlg	10	d-e	3000	G-D 3000E	3000	30
	18	d-e	2200	G-D 1500E	2400	22
	20	d-e	2200	G-D 1100E	2400	18
	141	d-e	2200	G-D 1500E	2400	22
Helmerich & Payne	46	dsl	1100	Emsco GB800	1210	15
	94	d-s	2000	Nat 110ME	1500	20
	98	d-s	2000	Nat 110ME	1500	20
Loffland Bros	32	d-e	4000	Emsco CE3000	3300	35
	34	d-e	3500	MC U1220	2500	28
	102	d-e	3300	MC U1220EBD	3300	28
	317	dsl	2250	G-D 1500	2500	24
Moran Bros	34	dsl	1700	Olwl 760	1000	15
Moran Drlg, E W	2	dsl	1800	G-D 700	800	14
	4	dsl	1450	Wils 120	1100	15
	5	dsl	1850	Wils 120	1100	18
	9	dsl	2000	Wils 150	1650	18
Nicor Drlg	49	d-e	3200	G-D 1500E	2000	25
	69	d-e	3200	MC U1220EB	2500	30
Nowotny & Conley Drlg	6	dsl	3200	Nat 1320UE	2000	12.5
Parker Drlg	54	gas	1800	Nat 130	1800	25
	59	gas	1650	OIME 1500C	1650	20
	167	dsl	1650	OIME SL1500	1650	20
	182	dsl	3000	OIME Hercules 3000E	3000	30
	201	dsl	4800	OIME E4000	4000	50
	212	dsl	3200	OIME 2000	2000	25
Penrod Drlg	8	dsl	2600	Nat 1320M	3425	25
	26	dsl	2600	Emsco C2	1950	25
	116	dsl	1300	Nat 1320M	2000	25
	117	dsl	1300	Nat 1625M	2000	25
	129	dsl	1000	Nat 80B	1760	15
	130	dsl	1000	Nat 80B	1760	15
Quarles Drlg	8	dsl	2000	OIME SD 7E	1000	22
Rowan Drlg	18	dsl	3200	Emsco A1500	2500	30
Sharp Drlg	39	dsl	2331	Olwl M2000	2742	30
	40	dsl	1770	Olwl 96	2025	18
	58	dsl	2319	Olwl 96	2607	23
	71	d-e	2331	MC U914EC	2742	23.
Tri-Service Drlg	9	dsl	2475	Nat 1320M	2475	22
Trigg Drlg	8	dsl	1200	Nat 125	1600	20
	9	d-e	2700	Beth 1350MX		22
U R C Drlg	4	d-e	1500	MC 914C	1500	22
	5	dsl	2250	MC 1220	2250	25
Unit Drlg & Expl	28	d-e	1600	G-D 1500E	2000	25
Westwood Drlg Co	Gary Jack	d-e	2000	G-D	2000	18
	22	dsl	2000	Emsco E900	2000	15
Wilson Bros Drlg	17	dsl	2600	Nat 110	2700	20
BLAINE						
Atco Drlg Southern	16	d-e	3200	Nat 110UE	1500	18
Bonray Drlg	4	dsl	900	MC U40	900	12
Grace/T R G Drlg	1	dsl	1245	Nat 75	1305	14.5
Hughes Drlg	3	dsl	1250	Idco 725	725	13.5
Rine Drlg	7	dsl	750	G-D 700	750	13.5
Santa Fe Drlg	SFM 14	dsl	1450	BDW 800MI	800	15
	SFM 2	dsl	1400	Idco ED900	900	14
Thomas Drlg	4	dsl	600	Emsco 500	600	10.2
Triad Drlg	10	dsl		G-D 700	1100	15
Unit Drlg & Expl	10	dsl	1000	Beth M58	1300	15.5
Westwood Drlg Co	21	dsl	1500	BDW 650M	1300	14
BRYAN						
Helmerich & Payne	89	d-s	2730	Nat 110UE	2730	20
CADDO						
Big Chief Drlg	46	d-s	3000	Emsco Electrohoist III	4200	25
	47	d-s	4000	G-D 3000E	3000	35
Brinkerhoff-Signal	15	dsl	2000	G-D 1500	2000	20
Cactus Drlg	33	dsl	2000	Nat 110	2550	20
Drillers	40	d-e	2100	G-D 1100E	2100	22
Dual Drlg	4	dsl	2000	Nat 110	1500	19
	15	dsl	2700	Wils 150A	1650	19
Eason Oil	22	d-e	2600	Emsco C1E	1500	21
	25	d-e	2600	Emsco C1E	1500	21
Enopco	1	dsl	2600	Nat 110M	2700	20
	6	dsl	2600	Nat 110M	2700	20
Grace/T R G Drlg	133	d-e	2000	G-D 1100E	2400	18
	134	d-e	2200	G-D 1500E	2400	22
	135	d-e	2200	G-D 1500E	2400	22
	138	d-e	2200	G-D 1500E	2400	22
	137	d-e	2200	G-D 1500E	2400	22
Helmerich & Payne	76	dsl	1650	Olwl 760	1815	16.5
CADDO (Cont'd)						
Lagersen Drlg	8	d-e	2000	Emsco CIE	2500	22
Loffland Bros	20	d-e	3200	Emsco C3000	3000	35
Moran Drlg, E W	10	d-e	2600	G-D 1500	2000	25
Nicor Drlg	6	dsl	1500	Nat 55	700	13.5
	12	dsl	1170	G-D 700M	700	13
	30	dsl	2000	MC U914C	1500	18
	31	d-e	2000	MC U914EC	1500	21
	33	d-e	2000	MC U914EC	1500	21
	35	d-e	2000	MC U914EC	1500	21
	42	d-e	2000	MC U914EC	1500	21
	45	d-e	2700	MC U1220EB	2000	25
	47	dsl	2600	Emsco C3E	2000	25
ONEOK Drlg	7	d-e	1466	G-D 800E	1000	17
Parker Drlg	149	gas	1000	Nat 75	1000	16
	205	dsl	2200	OIME 1500C	2200	22
	213	dsl	2200	OIME SL1500	2200	22
Resource Drlg	RD9	dsl	2330	Nat 110	2740	18
Rowan Drlg	30	dsl	2600	Emsco A1500	2400	22
Santa Fe Drlg	SFM 1	dsl	920	Nat 50A	450	11
Thomas Drlg	11	dsl	300	Wich R-6	300	6
Top Drlg	7	d-e	2000	Olwl 760E	1000	20
Tri-Service Drlg	10	dsl	1800	Olwl 860	1800	21
Trigg Drlg	5	g-b	500	Nat 50A	800	10
	7	dsl	1200	S/B N95	1600	20
Unit Drlg & Expl	8	dsl	1000	Nat 55	1588	15
Viersen & Cochran Drlg	6	dsl	2300	Beth 1013	2400	20
Westwood Drlg Co	20	dsl	1000	S/B N95	300	20
CANADIAN						
Basin Drlg	6	dsl	600	GD 700M	820	12
Bonray Drlg	3	dsl	900	S/B N7	900	10.5
Cactus Drlg	3	dsl	1800	Nat 80B	1650	15
Exeter Drlg	49	dsl	600	Nat 50	600	10.5
	52	dsl	600	MC U36	600	10.5
	53	dsl	600	Emsco GC450	600	10.5
	54	dsl	1000	Beth 1350	1100	18
	55	dsl	900	Beth 800	900	15
	58	dsl	800	Nat55	1000	12
	60	dsl	600	Nat 50	600	9
FWA Drlg	34	dsl	2200	Olwl 760	1560	15
Grace/T R G	8	dsl	800	Unit 15	1000	10.5
Loffland Bros	111	d-e	3300	Emsco A1500	2200	24
Moran Bros	31	el	2900	Idco E2500	2500	25
	35	el	1700	Olwl 76	1000	15
	36	el	2300	S/B N12	1500	20
Ratliff Drlg	11	dsl	850	S/B N7	850	10
Sabre Drlg Div Grace	8	dsl	1385	MC U15	1050	9
Santa Fe Drlg	SFM 5	dsl	1200	OIME SD5	750	12
	SFM 7	dsl	1200	OIME SD5	750	12
Top Drlg	5	dsl	1000	MC U15	1000	10
U R C Drlg	1	dsl	860	Nat 50	860	10
	2	dsl	1100	Nat 100	1100	15
	3	dsl	860	MC U36A	860	12.5
	6	dsl	1600	Idco BIR7585		10.5
CARTER						
Big Chief Drlg	12	gas	1600	Nat 80B	1600	14
Compadre Drlg & Expl	1	dsl	360	W-N A25G40	360	6
Grace/T R G Drlg	130	d-e	2200	G-D 1100E	2400	18
Johnson Bates Drlg	14	dsl	700	MC U15	450	7.5
Jones Drlg Corp	6	dsl	500		400	7
	7	gas	700		750	12
	8	gas	700		700	12
	18	dsl	600		600	8
Kingery Drlg	10	gas	300	Wils Giant	300	5
Loffland Bros	73	d-e	2160	MC U712A	2200	18
Magic Circle Drlg	12	dsl	900	Nat 50A	900	12
Moran Drlg, E W	18	dsl	1200	S-H 7000	40	9.5
Noble Drlg	N-133	e-s	3300	Nat 1320UE	1320	25
Ratliff Drlg	7	g-b	1020	Nat 75CB	1020	15
CHOCTAW						
Bodard & Hale Drlg	8	dsl	650	MC U36A	1100	13.5
CIMARRON						
Service Drlg	2	dsl	450	MC U34	450	6
	3	dsl	300	MC U34	400	6.5
CLEVELAND						
Bodard & Hale Drlg	9	dsl	550	Beth S55	700	9
	12	dsl	450	MAC 400	525	7.5
Drillers	26	dsl	700	Emsco GB500	700	10
Johnson Bates Drlg	8	dsl	1000	Wils Giant	1050	12
Santa Fe Drlg	SFDLI-20	d-e	3400	Olwl E2000	2000	25
	SFM 12	dsl	2050	G-D 800	1000	15
	SFW-7	d-e	2600	Emsco C3111	3000	30
CLEVELAND (Cont'd)						
Top Drlg	1	dsl	650	S/B N7	900	10
	6	dsl	350	Nat T32	350	7.5
Unit Drlg & Expl	22	gas	495	Nat 50	600	10
COAL						
Arden Drlg	4	dsl	1800	Emsco D2	1000	16
Cactus Drlg	51	dsl	700	S/B N55	850	9
COMANCHE						
Bonray Drlg	1	dsl	1230	Olwl 760	1230	16
	9	d-e	3000	Olwl E2000	2000	25
Drillers	48	d-e	3600	Idco E3000	3000	30
Husky Drlg	2	dsl	350	Idco H35	650	8
JFP Well Serv	8	dsl	2000	Olwl E2000	2000	25
Loffland Bros	200	d-e	3300	Emsco 3000 Type II	3300	50
Moran Drlg, E W	29	dsl	1450	G-D 700	800	13
Nicor Drlg	29	d-e	2700	G-D E1500	2000	25
Penrod Drlg	3	dsl	2600	Nat 1320M	3425	25
	21	dsl	2600	Nat 1320M	1950	15
	118	dsl	1600	Nat 1625M	3000	30
	127	dsl	1000	Nat 80B	1760	15
Resource Drlg	32	dsl	1040	Nat 610	1220	12
Rowan Drlg	9	d-e	2600	Nat 1625DE	2000	25
Westwood Drlg Co	23	d-e	3200	Emsco C2	2000	26
CREEK						
McLennan Drlg	5	dsl	450	Cbot 658	318	4
Whitehead Drlg Contr	1	dsl	450	Wils Model 30	425	4
CUSTER						
Big Chief Drlg	37	gas	1350	Emsco J1250	1350	16
Drillers	42	d-e	3000	Emsco Electrohoist II	3000	25
Dual Drlg	20	dsl	2250	Olwl 860	1400	22
	33	d-e	2800	Olwl 840	1500	22
Eason Oil	12	dsl	2000	Nat 80B	1200	16
Grace/T R G Drlg	11	d-e	2000	G-D 1100E	2400	18
	16	d-e	1500	G-D 800	1800	16
	23	dsl	1400	Nat 80B	1305	16
Helmerich & Payne	49	dsl	1650	Nat 110	1815	18
	95	d-s	1600	Nat 80UE	800	15
Lanex Drlg	A-12	d-s	1600	Emsco D2	750	13
	B-18	d-s	2700	G-D 1100E	1500	20
	B-20	d-s	2600	Emsco EHII	2000	20
Loffland Bros	196	d-e	3300	MC U1220	2200	28
	244	d-e	2500	MC U1220E	2200	28
Magic Circle Drlg	17	dsl	2460	Olwl 96	2460	20
Nicor Drlg	10	dsl	2000	MC U914C	1500	18
	55	d-e	2000	MC U914EC	1500	21
ONEOK Drlg	9	dsl	1110	MC U15	700	13
	12	d-e	2000	Olwl 840E	2000	20
Parker Drlg	170	dsl	1650	OIME SL1500P	1650	20
	210	dsl	2200	OIME 1500C	2200	22
Penrod Drlg	131	dsl	1000	Nat 80B	1760	
Quarles Drlg	9	dsl	2000	OIME SD 7E	1000	22
Santa Fe Drlg	SFDLII-21	d-e	2600	Nat 110UE	1500	17
	SFM 6	dsl	1200	OIME SL7	900	16
	SFW-17	d-e	1300	Nat 100	2000	14
Triad Drlg	11	dsl	1300	U-40	820	14
Unit Drlg & Expl	20	dsl	1000	G-D 700	1300	16
Viersen & Cochran Drlg	1	dsl	1400	Olwl 660	850	12
	2	dsl	1250	Nat 55	850	12.5
	15	dsl	1300	Olwl 660	850	14.5
Warrior Drlg	2	dsl	1600	S/B 75	1200	15
Westwood Drlg Co	1	dsl	1750	S/B N75	1500	12
Wilson Bros Drlg	16	dsl	2600	Nat 1320	2700	30
DEWEY						
Bonray Drlg	5	gas	700	Nat 50A	700	9
Brinkerhoff-Signal	68	dsl	700	Nat 55	700	12.5
Exeter Drlg	48	dsl	900	S/B N75	900	14
	59	dsl	600	Nat 50	600	10.5
FWA Drlg	5	dsl	1400	Wils Giant	850	11.5
Helmerich & Payne	55	dsl	1100	Nat 55	1210	14
	84	d-s	1700	Olwl 760E	760	16
Hickman Drlg	2	dsl	1000	BDW 650	1000	12
Lanex Drlg	B-16	d-s	2000	G-D 800E	1000	16
Mercury Drlg	1	dsl	2000	Emsco GB800	1470	16
ONEOK Drlg	2	d-e	1410	MC 36A	1000	13
Quarles Drlg	4	gas	1400	Emsco GB 500	500	12
Rine Drlg	5	dsl	700	S/B N55	700	9
Triad Drlg	5	dsl		Idco Super 750	1100	14
Trigg Drlg	2	g-b	700	Nat 75	900	12
Unit Drlg & Expl	18	dsl	1000	G-D 700	1300	16
	24	dsl	600	G-D 800	1200	15
Warrior Drlg	5	dsl	2000	BDW	1200	15
Westwood Drlg Co	12	dsl	800	G-D 700	1000	12
ELK CITY						
Parker Drlg	192	gas	1200	OIME 1000C	1200	16
ELLIS						
Forex Neptune and/or Affil	48	d-e	3200	G-D 1100E	1500	19
Hickman Drlg	5	dsl	1100	BDW 800	1100	15
Sage Drlg	4	dsl	350	Unit U15	500	11

NICOR Drilling Company
(918) 587-5507

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ELLIS (Cont'd)						
Service Drlg	8	dsl	800	MC U15	630	7
Triad Drlg	7	dsl		G-D 800	1100	16
Unit Drlg & Expl	9	dsl	600	S/B N55	1050	12
	11	dsl	1100	G-D 700	1300	15
Westwood Drlg Co	19	dsl	600	Olwl 52T	3000	8
GARFIELD						
Bonray Drlg	6	dsl	700	Nat 50A	700	9
Hughes Drlg	1	dsl	550	Idco H35	500	7.5
	2	dsl	550	Idco H35	500	7.5
Nicor Drlg	38	dsl	750	Wils 75	640	9
	80	d-m	780	Wils Mogul 42	450	9
Thomas Drlg	5	dsl	425	Wils Giant	400	8.9
	8	dsl	300	Idco H35	300	7.5
GARVIN						
Big Chief Drlg	41	gas	1400	S/B N75	900	12
	42	dsl	1800	Nat 80	1800	15
	43	dsl	2000	Nat 80B	2250	16
	48	d-s	4000	G-D 3000E	3000	35
Cactus Drlg	56	dsl	800	S/B N55	850	9
	57	dsl	550	Idco H35	450	6.5
Exeter Drlg	51	dsl	600	MC U36	600	10.5
	61	dsl	1000	Nat 80B	1100	17
Grace/T R G Drlg	2	dsl	825	G-D 500M	870	11.5
Helmerich & Payne	8	dsl	1100	Nat 55	1210	14
Johnson Bates Drlg	5	dsl	1000	MC U15	1100	10
Moran Drlg, E W	16	dsl		S-H 7000	400	9.5
Nicor Drlg	5	dsl	1200	Beth C50	450	10
ONEOK Drlg	5	dsl	1310	MC U15	900	10.5
Parker Drlg	186	dsl	2200	OIME 1500C	2200	22
Scott Drlg, Jerry	7	dsl	350	Crdw L350	600	8
	8	dsl	1520	MC U15	1000	11
Top Drlg	2	dsl	1200	Olwl 660	1200	14
GRADY						
Arden Drlg	6	d-e	3200	Emsco C3	3000	35
Cactus Drlg	35	d-e	3220	Nat 110UE	2000	20
Crescent Drlg	1	dsl	840	Beth S45E	420	7.5
Eason Oil	21	d-e	2000	Emsco D2	750	13
	23	d-e	3200	Emsco C3E	3000	30
Exeter Drlg	44	dsl	1000	G-D 800M	1100	15
Forex Neptune and/or Affil	50	d-e	3200	G-D 1500E	2000	21.7
Grace/T R G Drlg	15	dsl	1245	Nat 75CA	1305	15
Loffland Bros	99	gas	1300	MC U20	1300	15
M G F Drlg-Lafayette	46	dsl	1800	Idco S711	1500	18
Magic Circle Drlg	16	gas	1300	Beth M810	1300	16
Nicor Drlg	2	dsl	1500	MC U15	700	12
	11	dsl	2300	MC U1220B	2000	21
	64	d-m	1750	Emsco GB800	1000	15
Noble Drlg	N-83	dsl	1530	Nat 80B	1530	15
ONEOK Drlg	1	d-m	1150	MC U15	800	13
	8	dsl	1110	S/B N55	700	13.5
Parker Drlg	172	dsl	1650	OIME SL1500P	1650	20
	179	dsl	3000	OIME Hercules 3000E	3000	30
	196	dsl	3200	OIME E3000	3000	35
Penrod Drlg	133	dsl	1600	Nat 1625DE	4610	20
Ratliff Drlg	2	gas	1020	Nat 55	1020	14
Resource Drlg	RD-29	dsl	1560	Nat 80B	1835	14
Santa Fe Drlg	SFM 15	dsl	1450	BDW 800MI	800	15
	SFM 3	dsl	1250	OIME 1000SL	900	14
	SFM 4	dsl	1550	OIME SL1500	1500	18
	SFM 8	dsl	2700	OIME SD7E	900	20
	SFW-15	d-e	1600	Emsco C111	2000	30
	95	d-e	2800	Olwl E2000	1500	20
Schlensker Drlg	10	gas	900	G-D 800M	1350	16
Thomas Drlg	6	gas	600	Nat 50A	600	13
	9	dsl	640	S/B N46	640	13
Viersen & Cochran Drlg	18	dsl	2000	Nat 80B	1600	17.5
Warrior Drlg	3	dsl	1800	Nat 100	1800	17
GRANT						
Hughes Drlg	6	dsl	550	Idco H35	360	6.2
Leben Drlg	11	dsl	500	G-D 3000	500	7
Mendenhall Drlg	1	dsl	450	Fail 90	318	5
Vaughn Good Drlg	1	dsl	500	Coop 600	500	9
	2	dsl	1100	Coop 650	600	12
HARPER						
Challenger Drlg	3	dsl	700	Nat 50A	750	10
H30 Drlg	77	dsl	525	Idco H40	600	8
Zenith Drlg	1	dsl	800	S/B N7A	400	10.5
HASKELL						
Dual Drlg	2	dsl	1250	Wils Giant	650	9.5
Grace Miller Drlg	114	dsl		Nat 50	700	10
Moran Drlg, E W	21	dsl	1450	Wils 120	1100	15
Unit Drlg & Expl	2	dsl	700	MC U15	800	12.5
	29	dsl	1000	S/B N75	1200	16
HUGHES						
R W I T Drlg	2	g-l	690	MC U34	280	6
	8	g-l	601	MC U34	280	6

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
JEFFERSON						
Drillers	10	dsl	1600	Nat 100M	1600	18
KAY						
Kay Drlg	1	dsl	480	S/B N4	480	6
McLennan Drlg	3	dsl	450	Cbot 658	318	4.5
KINGFISHER						
American Western	10	dsl	1050	Cbot 750	700	8
	12	gas	950	Emsco 500	600	10.5
	14	gas	850	Emsco 500	600	10.5
	16	gas	850	Emsco 500	600	10.5
Beard Drlg (OK)	1	gas	675	Emsco G450	450	10
Bonray Drlg	7	dsl	376	Coop 550	475	7
	22	dsl	800	Idco H525	800	10.5
Drillers	36	dsl	600	Emsco GB350	700	8.5
Enopco	5	dsl	2000	Nat 80B	1800	18
Magic Circle Drlg	15	dsl	900	MC U15	900	12
Sabre Drlg Div Grace	4	dsl	600	Nat 370	525	7.5
LATIMER						
Cactus Drlg	29	dsl	2000	Nat 110	2550	20
Dual Drlg	18	dsl	1500	Beth M-810	1000	15
Exeter Drlg	46	dsl	900	S/B N75	900	14
Grace Miller Drlg	19	dsl	2000	G-D 1500E	2000	220
	117	dsl		OIME SL7	1500	20
Grace/T R G Drlg	19	d-e	2200	G-D 1500E	2400	22
Lanex Drlg	A-15	d-s	2000	Emsco D3	1000	16
	B-12	d-s	1600	Emsco D2	750	13
New Prospect Drlg	2	dsl	1000	S/B N75	1100	16
Quarles Drlg	1	dsl	1500	OIME 750	750	14.5
	3	dsl	2000	OIME 1000	1000	18
Unit Drlg & Expl	17	dsl	700	S/B N75	1300	15
LE FLORE						
Alexander Drlg	5	dsl	1800	Emsco A1100	1400	18
	6	dsl	800	W-N 250H40	400	7
C E C Drlg	2	dsl	1100	MC U15	800	10
Grace Miller Drlg	116	gas		S-H 7000	390	8
LINCOLN						
Johnson Bates Drlg	4	dsl	400	MC U34	375	6.5
Sabre Drlg Div Grace	6	dsl	450	Nat T20	335	6
LOGAN						
Basin Drlg	1	dsl	600	G-D 500M	820	10
	2	dsl	600	G-D 500M	820	11
	3	dsl	500	G-D 500M	820	10
	7	dsl	850	MC U36A-M	820	8
	8	dsl	750	Emsco D2M	820	13
	9	dsl	600	G-D 500M	820	10
	10	dsl	600	G-D 500M	820	10
Bodard & Hale Drlg	16	dsl	450	Idco H37	450	6.5
Hughes Drlg	5	dsl	550	Idco H35	360	6.2
Porter Drlg, Gene	1	dsl	600	MC U34	435	6
Sabre Drlg Div Grace	9	dsl	450	MC U34	450	6
Sloan Drlg	10	dsl	400	MC U34	450	6.5
	18	dsl	370	Crdw 350	450	7
LOVE						
Arden Drlg	10	d-e	2000	Emsco D3	1200	16
Beard Drlg (OK)	5	dsl	1379	Emsco D2	1029	15
Butler-Johnson	12	dsl	1300	G-D M700	1300	12.5
Grace/T R G Drlg	75	d-e	2200	Nat 1320UE	2400	22
Johnson Bates Drlg	9	dsl	700	Beth S50	450	7.5
Nicor Drlg	18	dsl	1300	MC U15	700	12.5
Viersen & Cochran Drlg	5	dsl	1250	Olwl 660	800	12.5
	17	dsl	1200	Olwl 660	850	13.5
McCLAIN						
Drillers	27	dsl	700	Emsco GB500	750	10
Exeter Drlg	50	dsl	900	S/B N75	900	14
Viersen & Cochran Drlg	4	dsl	1250	Nat 55	850	12.5
MAJOR						
Beard Drlg (OK)	2	gas	1200	MC U15	800	12
Dean Drlg	1	dsl	1150	Idco H40	900	10
Hughes Drlg	4	dsl	700	Idco H44	636	9
Logan Drlg	4	dsl	900	BDW 650	900	10
Nicor Drlg	7	dsl	1350	MC U15	700	11.5
	8	dsl	755	Nat 50CA	425	11
	14	dsl	1300	G-D 500M	650	10
	28	dsl	1000	MC U15	700	11.5
	81	d-m	900	Idco H40	550	8
Top Drlg	3	dsl	400	Olwl 500	450	8.5
Triad Drlg	9	dsl		BDW 650	800	12
Unit Drlg & Expl	23	dsl	600	MC U15	600	10
Viersen & Cochran Drlg	22	dsl	1300	Nat 610	850	12.5

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
MARSHALL						
Exeter Drlg	62	dsl	1000	Nat 110M	1100	17
Santa Fe Drlg	SFW-22	d-e	2600	Nat 110UE	1500	17
MC CLAIN						
Arden Drlg	14	dsl	1300	Nat SS	700	12
Beard Drlg (OK)	3	dsl	1379	MC U10	1029	14
	4	dsl	1379	MC U10	1029	14
Dual Drlg	1	dsl	1000	Wils 75P	900	12.5
Johnson Bates Drlg	3	dsl	1100	MC U34	1100	10.5
	15	dsl	1350	Wils Titan	1575	14
Mercury Drlg	8	dsl	2000	G-D M700	1400	17
ONEOK Drlg	3	dsl	550	Wils Giant	350	7
	11	d-e	2000	Nat 110UE	2000	20
Quarles Drlg	7	dsl	1050	Nat 750A	800	14
Ratliff Drlg	5	dsl	1100	Nat 75CS	1100	15
	12	dsl	700	G-D 500M	700	12
Trigg Drlg	4	dsl	700	Nat 75	950	12
NOBLE						
Bodard & Hale Drlg	4	dsl	450	MC U34	400	6.5
Bonray Drlg	8	dsl	850	Coop 750	650	10
Hughes Drlg	9	dsl	550	Cbot 500	343	6.5
	10	dsl	550	Cbot 550	425	7.5
Sabre Drlg Div Grace	118	dsl	450	U 34B	450	6
Sumpter & Barker Drlg	1	dsl	930	Wils Mogul 42	430	6.5
OKFUSKEE						
Scott Drlg, Jerry	1	dsl	350	S/B N4	350	5.5
	5	dsl	375	Beth S45	375	6
OKLAHOMA						
Adeco Drlg & Engr	17		690	OIME SL750	1035	14
Basin Drlg	15	dsl	1000	MC U712AM	1200	17
	16	dsl	1350	MC U914CM	1400	22
	17	dsl	1350	MC U914CM	1400	22
Big Chief Drlg	20	gas	1200	MC U40	960	13.5
	30	gas	1515	Idco 1050	1515	15
Bigard Drlg	18	d-e	2000	Idco ED1200	2000	20
Bodard & Hale Drlg	5	dsl	450	MC U34	425	6.5
	7	dsl	550	Beth S55	600	8
	15	dsl	450	MAC 400	525	7.5
Eason Oil	17	dsl	2300	Emsco C1	1500	21
	18	d-e	2300	Emsco C1E	1500	21
	19	dsl	1800	Emsco D2	750	13
	20	d-e	2000	Emsco D3	1000	16
	24	d-e	2600	Emsco C1E	1500	21
Exeter Drlg	63	dsl	450	Coop 750	600	8
Falcon Drlg	1	dsl	600	Beth S45A	400	7
Grace/T R G Drlg	142	dsl	1000	Beth 650	1000	12
Johnson Bates Drlg	1	gas	350	MC U34	300	5.7
	2	gas	325	MC U34	245	6.5
Lanex Drlg	C-9	d-s	1600	BDW 650	650	12
Mercury Drlg	3	dsl	2000	Olwl 96	2100	22
	5	dsl	2700	G-D 1100	3225	22
	6	dsl	1500	Emsco 500	1425	14
	12	dsl	2000	G-D 800	2100	20
	14	dsl	2000	MC U914	2100	22
	15	dsl	2700	Nat T1320M	3225	25
Nicor Drlg	1	dsl	1700	MC U20	1200	15
	3	dsl	785	MC U15	700	11.5
	54	d-m	400	Idco H35CKD	400	4.3
	65	d-e	2700	MC U914EC	1500	21
	71	d-e	2000	MC U914EC	1500	21
Parker Drlg	43	gas	1800	Olwl 96	1800	20
	47	gas	1400	OIME 1500C	1400	20
	71	gas	1600	Nat 125	1600	20
	114	d-e	2700	Idco 3000E	3000	30
	142	dsl	2600	Nat 1320E	3000	25
	164	dsl	1650	OIME SL1500P	1650	20
	181	dsl	3000	OIME Hercules 3000E	3000	30
	204	dsl	2200	OIME E1500C	2200	22
	208	gas	2200	Idco 711	2200	18
Ratliff Drlg	10	gas	1020	Nat 50	1020	10
	16	dsl	750	MC U15	750	10
	17	dsl	700	Nat 50A	700	12
S & T Drlg	8					
	11					
Sabre Drlg Div Grace	7	dsl	1050	MC U15	450	7.5
Schlensker Drlg	11	dsl	2400	G-D 1100M	2400	20
Scott Drlg, Jerry	6	dsl	1342	MC U15	1342	10.5
Seneca Drlg	1	d-e	1600	MC U36EA	1000	14
	2	d-e	1600	MC U36EA	1000	14
	3	d-e	1600	MC U36EA	1000	14
Thomas Drlg	1	dsl		S/B N42		11
Viersen & Cochran Drlg	3	dsl	1250	Nat 75	850	12.5
	10	dsl	2000	Nat 100	1000	15
	12	gas	900	Nat 50	800	9
Warrior Drlg	1	dsl		Emsco	400	5

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
OKLAHOMA CITY						
Blocker Drlg	25					12
	26					14
OSAGE						
Equity Drlg	175	dsl	300	Wils Super 38	300	4.2
Hughes Drlg	17	dsl	500	S-Star SS40	220	3.5
McLennan Drlg	4	dsl	318	G-D	238	2
PAYNE						
Hughes Drlg	15	dsl	550	Cbot 550	425	7.5
Sabre Drlg Div Grace	153	dsl	450	MC U34	450	6
Venture Drlg	2	dsl	550	Cbot 750	750	7.5
PITTSBURG						
Alexander Drlg	2	dsl	1200	Emsco G42	800	12.5
Arden Drlg	13	dsl	1600	Idco H7-11	700	12
	15	dsl	2000	OIME SL7	1000	16
Basin Drlg	13	dsl	1470	G-D 700M	1220	14
Dual Drlg	10	dsl	1250	Wils 120	1100	15
FWA Drlg	7	dsl	1500	Wils Titan	1040	14
	19	dsl	1600	Wils Titan	1040	14
Grace Miller Drlg	122	dsl		BDW 800	1300	15
	123	dsl		BDW 800	1300	15
Lagersen Drlg	4	d-e	2000	Emsco J1100E	2500	22
Moran Drlg, E W	8	dsl	1900	Wils 150A	1650	18
	14	dsl	1650	Wils 150	1650	15
R W I T Drlg	9	g-l	610	Wils	280	6
Unit Drlg & Expl	16	dsl	600	MC U15	800	11
PONTOTOC						
Baulch Drlg	1	dsl	350	S/B N4	275	4.8
Bodard & Hale Drlg	11	dsl	450	MAC 300	450	6.5
Scott Drlg, Jerry	10	dsl	400	Crdw 450	450	6
POTTAWATOMIE						
Bodard & Hale Drlg	6	dsl	600	Nat T20	450	6.5
	14	dsl	450	S/B N4	450	6.5
Sloan Drlg	12	dsl	370	S/B N4	450	6.5
PUSHMATAHA						
Dual Drlg	36	d-e	2000	Oiwl 760	1000	16
Loffland Bros	206	g-e	2160	MC U914B	2200	20
ROGER MILLS						
Baker & Taylor Drlg	5	dsl	1400	MC U20	1400	22
Basin Drlg	4	dsl	1600	G-D 700M	820	14
Challenger Drlg	32	dsl	2400	Nat 1320	2400	20
Dual Drlg	32	d-e	2800	Oiwl 840	1500	22
Forex Neptune and/or Affil	52	d-e	3200	G-D 1500E	2000	21.7
Grace/T R G Drlg	17	d-e	2200	G-D 1500E	2400	22
	132	d-e	3000	G-D 3000E	3000	30
Helmerich & Payne	44	dsl	1650	Nat 110	1815	22
	82	d-s	2800	Oiwl E2000	2000	26
	92	d-s	2000	Nat 110ME	1500	20
	93	dsl	1600	Nat 80B	800	15
	97	d-s	3400	Oiwl E2000	2000	26
Loffland Bros	18	d-e	2600	MC U1220EB	2200	28
	123	gas	1975	Nat 130	2200	26
	218	d-e	3300	MC U1220E	2200	28
	311	dsl	2250	G-D 1500	2500	24
Nicor Drlg	19	dsl	1650	Idco 750	750	15
Noble Drlg	DW-841	e-s	2775	Oiwl 840E	1400	20
ONEOK Drlg	6	dsl	1110	MC U15	700	11
Parker Drlg	203	dsl	2600	OIME E2000	2000	25
	218	gas	1400	OIME 1000C	1400	18
Rowan Drlg	7	dsl	3200	Emsco A1500	2500	22
	14	dsl	3200	Nat 1625M	3000	35
	31	dsl	3200	Nat 1625	3300	30
Santa Fe Drlg	SFM 11	dsl	1900	G-D 800	1000	15
	SFM 9	dsl	1600	BDW 800MX	800	16
Slawson Drlg	8	dsl	750	Idco H725	750	14.5
	9	dsl	1400	Idco H900	950	16.5
Tri-Service Drlg	12	d-s	3300	Oiwl E2000	2000	25
Unit Drlg & Expl	15	dsl	1300	MCSCO 914C	1850	25
Viersen & Cochran Drlg	20	dsl	1600	Nat 610	1300	12.5
	21	dsl	2000	Nat 80B	1600	17.5
Wilson Bros Drlg	1	d-e	2600	Idco E2100	2100	21
SEMINOLE						
Johnson Bates Drlg	7	dsl	1000	Wils Titan	1350	12
Leeman Drlg	1	dsl	500	Coop 550	525	8
Scott Drlg, Jerry	2	dsl	420	MC U34	430	6.5
Sloan Drlg	14	dsl	370	Nat T20	600	7
	16	dsl	370	Wils 42	600	7
	20	d-e	850	Wils 90EH	1000	12
STEPHENS						
Arden Drlg	7	dsl	1700	OIME SL7	1500	15
Big Chief Drlg	36	dsl	1400	Nat 55	900	11
Challenger Drlg	23	dsl	1800	G-D 11100	2700	18
	26	dsl	30	Nat T20	600	5
Grace/T R G Drlg	5	dsl	1245	Nat 75	1305	14.5
	14	d-e	2000	G-D 1100E	2400	18
Jones Drlg Corp	2	dsl	385		385	5
	5	gas	400	Beth 545	400	7
	10	dsl	2000		2000	20
	11	dsl	600		600	10
	14	dsl	1200		1200	14
	15	dsl	900		1000	14
	16	dsl	850		1400	16
Lanex Drlg	B-15	d-s	2000	Emsco D3	1000	16
Nicor Drlg	83	dsl	3200	MC U1220EB	2500	30
Ratliff Drlg	8	g-b	1020	Nat 50A	1020	10
	9	gas	700	Nat 50A	1020	11
Thomas Drlg	10	dsl	600	Wils Super Giant	600	11
TEXAS						
Damac Drlg	6	dsl	550	Cbot	450	6.5
Service Drlg	10	dsl	300	MC	400	5
Triad Drlg	4	dsl		S/B N7	800	11
TILLMAN						
Moran Drlg, E W	20	dsl	1200	S-H 7000	400	9.5
WASHINGTON						
Equity Drlg	150	dsl	300	Fail 2500	300	3/ 3.5"
WASHITA						
Arden Drlg	12	d-e	2600	Nat 110UE	1500	22
Bonray Drlg	2	dsl	1650	Oiwl 860	1650	20
	20	dsl	1680	Idco Super 711	1680	17
	30	dsl	2400	Nat 1320	2400	25
	31	dsl	2400	Nat 1320	2400	25
	32	dsl	1600	Nat 110	1600	20
Cactus Drlg	6	dsl	1300	Idco 711	1100	14
Challenger Drlg	6-E	dsl	900	Nat 80E	1000	14
Drillers	44	d-e	2000	G-D 2000	2000	25
Haning & Young Drlg	151	d-e	2000	S/B NE95	1700	18
Helmerich & Payne	48	dsl	1640	Nat 110	1820	22
	78	d-s	2000	Nat 110UE	1500	20
	80	d-s	2200	Nat 110UE	1500	20
	96	d-s	1600	Nat 80UE	800	15
	99	d-s	3400	Oiwl E2000	2000	26
Lagersen Drlg	7	d-e	2000	Emsco CIE	2500	22
Loffland Bros	19	d-e	3200	Emsco C3000	3300	35
	227	dsl	2400	MC U914A	2500	22
	324	dsl	2250	G-D 1500	2500	24
	327	dsl	2250	G-D 1500	2500	24
Magic Circle Drlg	18	d-e	4000	Emsco C2	2000	25
Mercury Drlg	7	dsl	2000	G-D 800M	2100	18
	10	dsl	2000	G-D 800	2100	18
Noble Drlg	N-115	dsl	2130	Nat 110	2130	20
	N-117	e-s	3645	Nat 110UE	3645	20
Parker Drlg	178	dsl	2200	OIME SL1500P	2200	22
	214	gas	2200	OIME 1500C	2200	22
Quarles Drlg	12	dsl	2700	MC U914C	2400	22
Ratliff Drlg	1	dsl	2640	Oiwl 96	2640	24
Resource Drlg	RD-27	dsl	1560	Nat 80B	1835	14
Rowan Drlg	5	dsl	3200	Nat 1625M	3000	35
Unit Drlg & Expl	21	dsl	1000	G-D 700	1300	16
	25	dsl	600	G-D 700	1300	16
Warrior Drlg	4	dsl	1800	BDW	1000	17
Westwood Drlg Co	18	dsl	2000	G-D 1500E	2000	20
Wilson Bros Drlg	22	d-e	2800	Oiwl E2000	2000	25
WOODS						
Damac Drlg	2	dsl	350	Wils Giant	350	6.6
Exeter Drlg	47	dsl	600	MC U36	600	10.5
Magic Circle Drlg	11	dsl	900	Nat 50A	900	10
	14	dsl	320	Cbot 2042	700	9.5
Sage Drlg	6	dsl	350	Emsco 350	500	9
Slawson Drlg	7	dsl	480	Idco H525	480	11.5
Triad Drlg	12	dsl	1050	U-15	700	12
WOODWARD						
Drillers	11	d-h	1500	Automatic H2000	2000	12
Hickman Drlg	3	dsl	1000	BDW 650	1000	12
	6	dsl	1100	BDW 800	1100	15
Rine Drlg	3	dsl	750	S/B N55	750	9.5
	6	gas	700	S/B N75	750	12
	9	dsl	1000	G-D 800	1000	13.5
Triad Drlg	2	dsl		S/B N45	550	9
	3	dsl		S/B N55	800	12
	8	dsl	2250	G-D 1500	2250	24

NICOR Drilling Company
(918) 587-5507

OREGON

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Bawden Drlg	21E	scr	1000	Emsco C-1	1500	18

OREGON (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
COLUMBIA						
Taylor Drlg	4	dsl	1000	Nat 50	750	9
	5	dsl	750	MC U34	375	6

PENNSYLVANIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
ARMSTRONG						
Fairman Drlg	12	dsl	400	Idco	250	5
CAMBRIA						
Delta Drlg	77	dsl	250	Idco H35KD	291	6
Fairman Drlg	14	dsl	400	S/B	350	7.5
CHAUTAUGA						
Union Drlg	8	dsl	1200	Idco BIRH37	425	6.5
CLEARFIELD						
Fairman Drlg	5	dsl	400	Crdw	350	4
	6	dsl	350	Idco H44	550	8
	7	dsl	350	Idco H44	550	8
	8	dsl	350	Idco H44	550	8
	9	dsl	400	Idco H44	500	8
CRAWFORD						
Devonian Drlg	1	dsl	325	Kremco K600	475	7
	2	dsl	505	Cbot 2042	475	6
P E P Drlg	3	dsl	650	Nat T45	600	7.5
ELK						
Delta Drlg	67	dsl		S-H 7000	480	9
ERIE						
International Petr Serv	11	dsl		Chal 32	475	4.2
Underwater Gas Dev	7			Chal 320	300	6
Union Drlg	4	dsl	1200	S-H 6000	340	7
	10	dsl	1200	Idco BIR5535	425	7.5
	12	dsl	1200	Cbot 500	425	6.5
	13	dsl	1200	Idco BIR5525	425	6
	14	dsl	1200	Crdw KB250	425	6.5
INDIANA						
Delta Drlg	91	dsl	255	Idco H35KD	291	6
	92	dsl	255	Idco H35KD	291	6
Fairman Drlg	10	dsl	400	Wils Mogul 42	350	5
	15	dsl	300	Idco	300	5
International Petr Serv	8	dsl	600	Wils Mogul 42	475	7.5
JEFFERSON						
Fairman Drlg	11	dsl	400	Idco H44	500	8
MERCER						
P E P Drlg	5	dsl	550	G-D 500M	500	7
Union Drlg	7	dsl	1200	Cbot 500	425	6.5
POTTER						
International Petr Serv	10	dsl	600	Wils Mogul 42	475	7.5
SOMERSET						
Delta Drlg	72	dsl	250	S-H 7000	440	9
TIOGA						
Union Drlg	9	dsl	1200	Cbot Exp III	425	9
VENANGO						
Delta Drlg	78	dsl	250	Idco H35KD	291	6
P E P Drlg	8	dsl	550	G-D 500	500	10
WARREN						
International Petr Serv	5	dsl	475	Wils 42	475	7.5

SOUTH CAROLINA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
COLLETON						
Delta Drlg	83	dsl	2600	Emsco C1 Type III	2331	18

SOUTH DAKOTA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Cardinal Drlg	9	dsl	1120	Nat 50CA	720	11.5
HARDING						
Cardinal Drlg	15	dsl	1060	Emsco GA500	760	10

TENNESSEE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CAMPBELL						
Miller Contract Drlg	16	dsl		I-R T4	600	3.5
FENTRESS						
Norman Drlg, James R	2	dsl	750	I-R	450	2.5
RHEA						
Delta Drlg	71	dsl	1000	S-H 7000	440	9

TEXAS

UNDESIGNATED

KELLEY
ONSHORE DRILLING CO.

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Ard Drlg	2	dsl	1986	MC U20	1800	18
	3	dsl	1400	MC U40	1200	15
	4	dsl	900	MC U15	900	12
	8	dsl	1900	Emsco 800GB	1800	16
Baker & Taylor Drlg	2	dsl	1400	MC U20	1400	20
	4	dsl	1140	MC U20	1140	18
	6	dsl	1400	MC U40	1400	20
	7	dsl	870	MC U15	870	11
	10	dsl	870	MC U15	870	11
	14	dsl	1140	MC U40	1140	18
Blocker Drlg	6	dsl	1500	Cbot HT Expl	950	10
Continental Drlg	2	d-e	2600	Idco E1700	1700	19
	11	d-e	2600	Idco E1700	1700	19
	14	d-e	2000	Idco ED1200	1200	16
	33	d-e	2600	Idco E1700	1700	19
	42	d-e	3200	Idco E2100	2100	25
Cothrum Drlg	2	dsl	926	MC U15A	912	11.5
	3	dsl	1200	S/B N72W	912	12
	5	dsl	1525	BDW 650	912	14
	6	dsl	750	Emsco G500	600	7.5
	8					
	9	dsl	900	S/B N4	500	6.5
	10	dsl	1500	G-D 1500	2250	24
	11	dsl	250	G-D 210B	250	10
	14					
	16					
	17					
	20					
Culver Drlg	3	dsl	800	G-D 800	800	16
	4	dsl	800	S/B N45	700	10/4''
	6	d-e	2000	G-D 2100	2000	30/5''
	11	dsl	1500	MC U914C	1500	17
	16	dsl	800	G-D 700	800	14
D B Drlg	12	dsl	1040	Nat 100	1040	16
Deutsche Tiefbohr	T-12					
	T-2					
Eljay Drlg	3	d-s	3400	Olwl E3000	3000	30
Faith Drlg	2	dsl	1500	Nat 55	1300	12
Faulk Drlg	4	dsl	450	S/B N4	450	6
Frio Drlg	4	dsl	1100	Nat N55	1100	12
Gibson Drlg	1	dsl	606	Wils Mogul 42	398	5
	5	dsl	1030	Wils 75P	700	9
	7	dsl	895	Emsco GB350	680	8.5
Grace France Drlg	3	el	2400	Olwl E760	2400	17
	6	dsl	1300	Nat 610	900	13
Hurt & Assoc, Clint	12	dsl	1200	Wils 75	900	11
J & W Drlg	3	dsl	280	Wils Mogul 42	440	6
J 3 Drlg	1	dsl	1375	MC U36A	950	14
	2	dsl	1650	MC U36A	950	14
	3	dsl	1100	MC U34B	750	8.5
	4	dsl	1100	MC U34B	750	8.5
	5	dsl	2470	MC U914	2470	20
Johnn Drlg	5	dsl	700	MC U15	700	8.5
	10	dsl	800	Olwl 66	800	10
Jones Drlg Co	53	dsl	225	Houston Portable	225	3
	54	dsl	425	Beth S45	425	6
	55	dsl	450	Beth S45	425	7
Justiss Oil	5	dsl	450	Beth S45E	300	6.5
	14	dsl	800	Emsco GB500	900	11
	25	dsl	250	Emsco GC350	480	12
	30	dsl	1000	Beth 1013	1400	17
	31	g-b	800	Wils Giant Roadair	650	10
	32	g-b	700	Beth 450	900	12
	36	dsl	1000	1013	1200	16
King Drlg	1	dsl	1177	Crdw 700	800	12
	9	dsl	1177	Crdw 700	800	12.5
Ladrido Drlg	1	dsl	1600	MC U15	1050	13.5
Luke Grace Drlg	1	g-b	500	MC U15	750	10.5
	2	dsl	500	MC U15	750	10.5
M G F Drlg-Houston	6	dsl	600	Nat T32	500	9
	30	dsl	750	Nat 610	800	12

TEXAS (Cont'd)

UNDESIGNATED (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
M G F Drlg-Houston	31	dsl	700	Olwl 76	900	12
	32	dsl	750	Nat 610	800	12
	37	dsl	500	G-D 500	700	9
	38	dsl	1600	Emsco C1	1200	17
	39	dsl	2200	Nat 125	1500	20
McBay Oil & Gas	1	dsl	3406	Wils Super 38	3306	5
	2	dsl	3406	Beth S50	3408	8
Mellon Drlg	2	dsl	1300	Emsco GB350	750	10
	3	dsl	750	Beth S50	375	6.2
	4	dsl	750	Beth S50	375	7
Nixon Drlg	1	dsl	300	Crdw CatD	300	4
	7	dsl	400	Midway	600	6.5
Norwood, A N	1	dsl	450	Wils Super 38	350	5.5
	2	dsl	700	S/B N4	450	6
	3	gas	1000	S/B N4	450	6
	4	dsl	600	Nat T20	450	6
Originala Drlg	1	dsl	400	Wils Super 38	400	6
	3	dsl	400	Nat 50A	400	8.5
Padre Drlg	3	dsl	700	RMI	800	10
	9	dsl	1300	S/B 4610	450	8.5
Pearl Expl	1	dsl	600	Wils 65	500	7
Price & Co, J A	3	dsl	1000	G-D Model 3000	370	5
PRC Drlg	1	dsl	840	S/B RR800	385	8
	2	dsl	804	MC U34	385	7.5
	4	dsl	1040	Cbot 2345	770	10
	6	dsl	1817	S/B N75A	1040	14
Rio Colorado Drlg	119	dsl	1300	Emsco A800	1600	12/5''
	141	dsl	1200	Nat T45	900	10.5
	145	dsl	2000	Nat 110	1650	18
SH & J Drlg	1	dsl		Crdw O	800	10
Safari Drlg	1	dsl	640	MC U15	640	10
Sealy & Co	2	dsl		Fall 2500		3
Shuler Drlg	4	dsl	700	Emsco GB350	700	8.5
Sojourner Drlg	7	dsl	350	MC U15	7500	7.5
	10	dsl		MC U15	550	7
South Texas Drlg	5	dsl	500	S/B N45	500	8
	6	dsl	650	S/B N46	800	10
	7	dsl	910	Idco H1200	1200	15
Tommy's Oilwell Drlg	2	dsl	800	Beth S50	476	7
	6	dsl	476	Wils 550		5.5
	7	dsl	800	S-H 5000	476	7
	8	dsl	800	SOS 6000S	650	8
	9	dsl	800	Crdw L	500	4
Transcontinental Drlg-Magnolia	2	gas	500	Emsco GB350	500	8.5
	5	dsl	1050	Olwl 76	1050	11.5
	35	dsl	1000	G-D 800M	1000	15
Tucker Drlg	1	dsl	750	S/B N55	750	10
	3	dsl	350	S/B N45	800	6.5
	4	dsl	214	MC U15	450	7.5
	5	dsl	750	Emsco GE500	750	10
	7	dsl	375	Beth 560	600	7
	9	dsl	750	Nat	750	10
	11	dsl	525	BDW 800	1200	14
Verna Corp	12	dsl	500	MC U15	600	11.5
	19	dsl	550	MC U15	800	11.5
	26	dsl	500	Idco H40	750	8
Wes-Tex Drlg	22					

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ANDERSON						
Henley Drlg	220	dsl	1200	Cbot 900	1000	10
Hinton Drlg, W B	5	dsl	900	S-H 7000	450	10
Schlensker Drlg	5	dsl	950	MC U15	950	10
	20	dsl	1270	Nat 75CA	1270	14
Thunderbolt Drlg	52	dsl	2000	Nat 110M	1845	18
ANDREWS						
BB&C Drlg	1	dsl	350	Unit U34B	425	6
BJM Drlg & Expl	2	dsl	800	N 4213	600	8.5
	6	dsl	1200	MC U15	1000	12
Cactus Drlg	20	dsl	850	S/B N45	1080	7
	67	dsl	550	Nat T32	454	6.5
Cherokee Drlg & Dev	5	dsl	900	BDW 450	531	7
Dual Drlg	31	dsl	1600	Olwl 500	600	9
Kenai Drlg	15	dsl	600	Emsco GB500	80	11
	25	dsl	700	Emsco GB500	800	11
M G F Drlg-Midland	9	dsl	850	Emsco GC500	850	14
Moran Bros	71	dsl	500	Nat 370	550	8.5
Quarles Drlg	5	dsl	850	Nat 50A	500	12
Rio Colorado Drlg	138	dsl	1750	Idco H1000	1000	12
	139	dsl	1200	Nat T45	900	11.5
	143	dsl	1200	Nat T45	1100	12.5
Rod Ric	3	dsl	670	S/B N45M	820	10
	4	dsl	750	Idco H40	600	8.5
	7	dsl	900	W-M Hellhoist	900	10
Sharp Drlg	63	dsl	1500	Emsco D3	1836	18
	370	d-e	1488	MC U712EC	1995	18
Sierra Drlg Co	1	dsl	500	BDW Min-Max	800	10
	2	dsl	500	BDW 600	800	10
	4	dsl	500	OIME SL5	1000	15
TMBR Drlg	10	dsl	1300	Beth 650M	750	10
	13	dsl	700	MC U15CA	500	10.5
	25	dsl	700	G-D 500	700	11
	30	dsl	350	MC U15	500	7
	31	dsl	600	MC U15	500	7
Verna Corp	13	dsl	600	S/B N4	400	6.5

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ANGELINA						
Guffey-Schlensker Drlg	1	dsl	700	Unit U36A	933	11
Lagersen Drlg	5	d-e	1600	Emsco J750E	1250	16
Nicor Drlg	4	dsl	2000	G-D 800	1000	15
Noble Drlg	OW-77	dsl	800	Olwl 760	800	14
ARCHER						
Megargel Drlg	4	dsl	350	Beth S45B	275	5.3
	10	dsl	750	MC U15	750	7
ASSUMPTION						
Wilson Bros Drlg	11	dsl	2400	Nat 110	2700	20
ATASCOSA						
Delta Drlg	81	dsl	1300	S-H 7000	460	9
Southland Drlg	3	dsl	1650	S/B N75		12
Willis Drlg	9	dsl	1000	G-D 700	1000	12
BEE						
Buzzini Drlg	8	dsl	1400	Olwl M2000	2000	20
Delta Drlg	87	d-s	2000	Emsco D3 Type II	2592	16
Harkins & Co	9	dsl	2100	Emsco A1100	2100	18/5''
BORDEN						
Sterling Drlg	2	dsl	1500	Nat 610	1150	13
Wes-Tex Drlg	9	dsl	700	Nat 50A	700	10
	17	dsl	335	MC U34	500	8
BORDON						
Phelps Drlg Intl	21	dsl	1000	Nat 370	550	95
BRAZORIA						
Bawden Int'l	31	d-s	2000	Nat 110UE	1500	18
Big 6 Drlg	2	dsl	800	Cbot	600	10
BSE Drlg	1	dsl	500	Wils Mogul 42	500	9
Forex Neptune and/or Affil	51	d-e	3200	G-D 1500E	2000	21.7
Loffland Bros	107	dsl	2160	S/B N12	2400	17
Wilson Bros Drlg	3	dsl	2600	Nat 1320	2700	30
	23	d-e	2800	Olwl E2000	2000	25
BRAZOS						
Atco Drlg Southern	4	dsl	1550	Nat 55	550	12
	19	dsl	1500	Olwl 66	700	10.5
	50	dsl	1850	Nat 100HD	750	15
	52	dsl	1500	MC U40	900	12
M G F Drlg-Houston	7	dsl	700	MC U15	800	11
M G F Drlg-Midland	7	dsl	850	S/B N55	850	12
McMurrey Petr	1	dsl	800	S-H	750	10
Nicklos Drlg	68	d-e	1500	Olwl 660E	1000	12.5

SPARTAN
DRILLING
(713) 955-0625 (409) 775-7071
(303) 293-8006 (406) 482-6470
(403) 262-7778

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Spartan Drlg	6	d-e	600	Sup 700E	700	10
	7	d-e	600	Sup 700E	700	10
	16	d-e	800	Sup700E	700	10
BROOKS						
Cinco Drlg	11	d-e	2000	Sup 1000	1000	16
Cliffs Drlg	29	dsl	2600	Nat 110	2475	20
Harkins & Co	13	dsl	1477	Cbot 1000	1000	12
Magee-Poole Drlg	7	dsl	1130	Cbot 750	608	9/4''
	10	dsl	1500	Cbot 900	850	11/4''
Richards Drlg Co	5	g-b	1200	S/B N75	900	12.5
Richards-Armstrong	7	dsl	1900	Cbot 1000	900	12.5
San Patricio Corp	6	dsl	1500	Shaf 800	900	13
BURLESON						
Basin Drlg	12	dsl	1470	G-D 700M	1220	14
Sterling Drlg	12	dsl	1500	Nat 610	1100	13
	19	dsl	1110	S/B N46	770	11
CADDO						
Moran Drlg, E W	27	d-e	3200	G-D 1500E	2000	25
CALHOUN						
Mesa Drlg	3	dsl	675	Weis W45	550	8
Richards-Armstrong	6	dsl	2500	Olwl 860	2400	18
CALLAHAN						
Hack Drlg	1	dsl	350	S/B N4	350	7
	4	dsl	225	Nat T8	250	4
Safari Drlg	6	dsl	300	Emsco U34	370	6

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CAMP						
Cape Drlg	5	dsl	400	W-N Apache 95040	425	6
FWA Drlg	27	dsl	2000	G-D 800M	1560	15.5
Hinton Drlg, W B	3	dsl	1700	Nat 80B	1650	15
Thunderbolt Drlg	20	dsl	1150	Wils Mogul	476	8
CARSON						
Hudson Drlg, Leonard	8	dsl	300	Wils Mogul	450	5.5
Stahico Drlg	1	dsl	510	Emsco 380	475	5
CASS						
Lester Drlg, Dan	10	dsl	1800	Olwl 860	2400	20
Schlensker Drlg	8	dsl	635	Wils Mogul 42	475	7
CHAMBERS						
Delta Drlg	100	d-e	2000	Emsco D3	1560	16
Goldrus Drlg	21	dsl	1200	Cbot 1000	872	13.5
	23	dsl	870	Cbot 900	680	12
Grace France Drlg	2	dsl	1700	Olwl 760	1700	17
M G F Drlg-Lafayette	43	dsl	1800	Olwl 96	1200	18
South Texas Drlg	4	dsl	1000	S/B 1046	750	10
CHEROKEE						
McMurrey Petr	3	dsl	800	S-H	750	10
Rainbow Drlg	4	dsl	1800	Cbot 1200	1200	15
	5	dsl	2000	Cbot 1200	1200	15
Wheless Drlg	2	dsl	1200	Emsco D2	1200	11
CLAY						
Bennett Prod Corp	1	dsl	900	MC U15	900	13

L.D. BURNS DRILLING COMPANY
One Parker Square, Suite 500
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Wichita Falls, Texas 76308

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Burns Drlg	3	dsl	800	Wils 75	780	10.5
	5	dsl	744	Beth S55	780	10
C M D Drlg	1	dsl	750	Wils Mogul 42	398	7
COCHRAN						
Norton Drlg	2	dsl	450	Wils Mogul 42	650	7
Sitton Drlg	7	dsl	450	Wils 75P	900	11.5
COKE						
D B Drlg	6	dsl	1150	S/B N45	575	9
	9	dsl	940	Schl 50560005	450	8.5
GCO Drlg	1	dsl	640	Nat T20	450	7.5
COLEMAN						
Bandera Drlg	10	dsl	775	MAC 300	475	7.5
Safari Drlg	3	dsl	340	S/B N4	300	7
	8	dsl		Detroit Diesel 8V		6
COLORADO						
Delta Drlg	17	d-s	2300	Emsco C1 Type II	2582	16
	20	d-s	2600	Emsco C2 Type II	3456	20
Padre Drlg	4	dsl	500	S/B H4210	400	7.5
COMAL						
Loffland Bros	110	dsl	2160	S/B N12	2400	20
	331	dsl	2160	MC U1220	2400	20
COOKE						
Arbuckle Drlg	1	dsl	700	BDW 400T	500	8.5

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• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Burns Drlg	1	dsl	1360	Sea Coast 10004S	780	14
Felderhoff Bros Drlg	1	dsl	285	Wils Mogul	185	5.5
	2	dsl	95	Wils Giant	650	9.5
	3	dsl	600	MAC 400	350	7.5
Jones Drlg Corp	12	dsl	1200		1200	10
COTTLE						
Sojourner Drlg	6	dsl		MC U15	550	7
CRANE						
BJM Drlg & Expl	4	dsl	1200	MC U15	1000	12
Cactus Drlg	69	dsl	750	Nat 370	718	10
	70	dsl	800	Nat 370	916	10

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CRANE (Cont'd)						
Johnn Drlg	8	gas	800	S/B N75	800	12.5
	9					
Moran Bros	58	dsl	1300	Cbot 750	750	9
Resource Drlg	RD-26	dsl	1560	Nat 80B	1835	14
Tahoe Drlg	4	dsl	700	G-D 500M	700	14
TMBR Drlg	32	dsl	1200	Nat T16		
Verna Corp	11	dsl	550	MC U15	810	11.5
	14	dsl	500	Wils Mogul 42	550	7
	20	dsl	1000	Verna Drlg	1500	16
	34	dsl	1000	Emsco A800	1200	15
CROCKETT						
D B Drlg	25	dsl	125	Unit U15	800	10
Delta Drlg	2	dsl	1400	G-D 700M	784	12.5
	4	dsl	2150	Nat 100	1560	16
	70	dsl	300	S-H 6000	380	7
Dual Drlg	14	dsl	1560	Olwl 760	1000	15
Sterling Drlg	11	dsl	375	Idco H30	480	6.5
	21	dsl	1180	S/B N46	770	11
Transcontinental Drlg-San Angelo	95	dsl	750	G-D 500	750	12
Wes-Tex Drlg	15	dsl	335	S/B N4	500	8
CULBERSON						
Kenai Drlg	2	dsl	2000	Emsco J1250	1800	15
DAWSON						
Cactus Drlg	14	dsl	800	Olwl 66	1200	11
GCO Drlg	5	dsl	820	MC U15	850	9.5
Hurt & Assoc, Clint	9	dsl	1300	Wils 75	900	11
Landis Drlg	1	dsl	1000	BDW 650M	1000	13
	3	dsl	800	S/B N55	900	11.5
Moran Drlg, E W	26	dsl	1300	CEI 75D	750	11
Robinson Drlg of Texas	4	dsl	750	Nat 50A	900	12.5
Wes-Tex Drlg	10	dsl	300	S/B N4	500	8
	18	dsl	600	Nat 50CA	900	10
DE WITT						
B D K Drlg	4	dsl	1095	S/B N7	870	11.5
DELTA						
Maxwell Herring Drlg	20	dsl	1220	S/B 75A	1220	14
	22	dsl	1775	Wils 75	1100	10
DIMMIT						
Bearden Drlg	8	dsl	1200	Wils 75	900	9.5
	9	dsl	1200	Wils Mogul Super 42	900	9
Dixon Drlg	9	dsl	700	S-H 5000 Port	450	6
DUVAL						
Delta Drlg	99	d-e	3200	Emsco C2	3456	25
Magee-Poole Drlg	12	dsl	1500	Cbot 900	950	11/ 4"
Quarles Drlg	11	dsl	2700	MC U914C	2400	22
EASTLAND						
Bandera Drlg	9	dsl	700	MAC 300	475	7.5
J & W Drlg	1	g-d	180	Harris 5000	340	5
	2	gas	180	Idco 150	180	3.5
Wes-Mor Drlg	2	dsl		MC U34		6
	6	g-b		MC U34		4.5
ECTOR						
Cactus Drlg	54	dsl	600	Beth S55	454	6
	66	dsl	500	S/B N4	454	6
	68	dsl	500	Idco H30	454	6
D & R Drlg	2	st	2000	Emsco EDA	1700	20
D B Drlg	7	dsl	1235	Nat 50A	850	11.5
Drilltech Inc	1	dsl	1000	G-D 500M	850	10
	2	dsl	1000	G-D 500M	850	10
Johnn Drlg	4	dsl	700	MC U15	700	8.5
Kenai Drlg	10	dsl	365	Emsco GA250T	400	6
	16	dsl	700	Emsco GA500	780	11
	17	dsl	800	S/B N4	580	7
	19	dsl	825	Emsco GA500	800	11
	32	dsl	1200	Emsco GA500	800	11
M G F Drlg-Midland	1	dsl	750	Beth M58	750	12.5
	2	dsl	800	MC U15	800	10
Moran Bros	4	el	1500	Emsco A800E	1000	15
	72	el	1300	Nat 110UE	1500	20
Santa Fe Drlg	SFW-10	d-e	2000	Emsco Electrohoist H11	1800	24
	SFW-3	d-e	2900	Emsco A1500E	2000	30
	SFW-4	d-e	2600	Emsco C3111	3000	30
	SFW-6	d-e	2300	Emsco C3111	3000	30
	SFW-8	d-e	2600	Emsco A1500E	2000	30
	25W	d-e	1000	Nat 80UE	1000	12
	26W	d-e	1000	Nat 80UE	1000	12
Sterling Drlg	4	dsl	1075	Nat 50A	900	12
	9	dsl	1350	S/B N75	1100	14
	16	dsl	1400	S/B N75	1230	14
	17	dsl	1500	S/B N75	1230	14
	22	dsl	1520	Nat 610	1100	13

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ECTOR (Cont'd)						
Tahoe Drlg	3	dsl	7000	Emsco D1	700	14
TMBR Drlg	12	dsl	700	Nat 50	600	10.5
Verna Corp	15	dsl	600	MC	600	11.5
	17	dsl	550	MC U15	650	11.5
	18	d-e	1000	Nat 1320E	2000	22
	31	dsl	1212	MC U15	800	11
	38	dsl	1212	MC U15	800	11
	40	dsl	700	MC U15	800	11
ERATH						
Lynx Drlg	1	dsl	1000	MC U15	720	10
	3	dsl	500	Idco H30	380	7
FAYETTE						
Houtech Drlg	802	dsl	1600	G-D 700M	1200	15
Houtech Energy Inc	801	dsl	1500	Seaco 1400M	1300	15
Nicor Drlg	73	d-m	1500	Cbot 2550TRD	1200	15
	75	d-m	1750	Cbot 2550TRD	1200	15
	79	d-m	2000	G-D 700M	700	14
Penrod Drlg	125	dsl	1000	Nat 80B	1760	15
Resource Drlg	RD-28	dsl	1040	Nat 610	1220	12
	RD18	dsl	1040	Nat 610	1220	12
Senior Drlg	40	dsl	1500	Cbot 1200	1300	13.5
Sterling Drlg	1	dsl	900	Nat 50A	900	12
	5	dsl	1230	Nat 50CA	820	11
	7	dsl	850	Nat 50A	900	12
	15	dsl	1400	S/B N75	1100	14
	18	dsl	1250	Nat 610	1100	13
Williams Drlg of South TX	1	dsl	585	Cbot 750	750	9.5/ 4"
FISHER						
Safari Drlg	7	dsl	480	Emsco G42	560	7
Sojourner Drlg	3	dsl		MC U15	550	7
Wes-Tex Drlg	19	dsl	600	S/B N4	600	8
FOARD						
Burns Drlg	2	dsl	900	Wils 75	780	10.5
FORT BEND						
Challenger Drlg	35	dsl	800	S/B N75	1200	12
FWA Drlg	18	dsl	1150	Wils Giant	360	7.5
Pozos Intl Drlg Serv	1080	dsl	1500	Idco BIR8005	940	11
Rio Grande Drlg	8	dsl	550	Nat 370	770	10
FRANKLIN						
Globe Drlg	5	dsl	850	Olwl 76	1000	14
FREESTONE						
Basin Drlg	11	dsl	1470	G-D 700M	1220	14
Dual Drlg	7	dsl	2100	Nat 1320M	2000	25
FWA Drlg	20	dsl	1700	Wils Super Atlas	1040	14
	26	dsl	2000	G-D 800M	1560	14
	28	dsl	2700	G-D 1100M	1560	18
Grace France Drlg	1	dsl	1600	G-D 700	900	13
Hinton Drlg, W B	9	d-e	2600	Nat 110UE	3000	20
Moran Bros	38	el	3200	Emsco C2 Type II	2000	25
Murco Drlg	42	d-s	2800	Olwl E2000	2000	25
Noble Drlg	N-81	dsl	1420	Nat 80	1420	14
O'Neal Drlg	14	dsl	15000	Nat 80B	1500	15
	15	d-e	2000	G-D 800	1500	18
Rosamond Drlg	11	dsl	1425	OIME SL5	1425	15
Thunderbolt Drlg	53	dsl	1400	Wils 75	950	11
Verna Corp	28	dsl	1000	MC U16	800	10
FRIO						
Cinco Drlg	6	dsl	1015	MC U15	780	11
F & N Drlg	1	dsl	525	Kremco K600	600	8
GAINES						
BJM Drlg & Expl	1	dsl	600	MC U15	600	12
Cactus Drlg	53	dsl	850	Beth S55	670	7.5
	64	dsl	700	S/B N45	670	7.5
Cherokee Drlg & Dev	3	dsl	1150	Wils 75	900	11
GCO Drlg	9	dsl	1450	Beth 650	850	14
Henley Drlg	219	dsl	600	S/B N46	950	12
Hondo Drlg	2	dsl	700	S/B N55	700	15
	6	dsl	700	MC U15	700	10
	9	dsl	700	S/B N45	700	10
	11	dsl	800	MC U15	800	11.5
M G F Drlg-Midland	10	dsl	900	Beth M58	900	12
Moran Bros	37	dsl	1000	Nat 610	750	12
Norton Drlg	3	dsl	475	Wils 75	850	10.5
Rod Ric	6	dsl	450	Beth S45E	450	7.5
GALVESTON						
Frio Drlg	2	dsl	800	Nat J45	600	10
Goldrus Drlg	19	dsl	1110	Cbot 750	580	10
Pozos Intl Drlg Serv	981	dsl	1890	S/B N46	940	12.5
Resource Drlg	RD-21	dsl	2330	Nat 110	2740	18
Wilson Bros Drlg	5	dsl	2600	Nat 110M	2700	20

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
GARZA						
D B Drlg	5	dsl	585	S/B N4	450	8
Douglas Drlg	1	dsl	700	Nat 50CA	700	10
	2	dsl	900	BDW 650M	900	12.5
Mesa Drlg	2	dsl	675	Weis W45	500	8
Robinson Drlg of Texas	3	dsl	750	MC U15	900	10
Wes-Tex Drlg	5	dsl	550	Nat 50A	700	10
GLASSCOCK						
Delta Drlg	61	dsl	1800	Idco Super 711	1640	15
Dual Drlg	35	d-e	2000	Emsco D3	1000	16
FWA Drlg	30	dsl	1100	Wils Giant	900	10
Hondo Drlg	8	dsl	800	S/B N75	800	12.5
Kenai Drlg	28	dsl	1200	S/B N7	800	12
Moran Bros	66	dsl	1300	S/B N75A	750	15
Safari Drlg	4	dsl	310	Nat T20	270	6
	5	dsl	370	Emsco GA250T	280	5
Tri-Service Drlg	3	g-b	750	Olwl 76	750	13
	4	g-b	700	Olwl 66	750	10
TMBR Drlg	18	dsl	500	MC U15CA	840	10
	19	dsl	700	Nat CA50	700	10
Wes-Tex Drlg	4	dsl	650	Emsco G500	650	1
Willbros Drlg	6	dsl	800	Emsco G500	800	12
GOLIAD						
Buzzini Drlg	9	dsl	1400	Olwl M2000	2000	20
Nicor Drlg	9	dsl	2000	OIME 1500SL	1500	18
Resource Drlg	RD5	dsl	2330	Nat 110	2740	18
Rio Grande Drlg	9	dsl	1300	Nat 110M	2400	20
GONZALES						
Cinco Drlg	1	dsl	900	MC U15	780	11
	2	dsl	890	Nat T32	850	8
	4	dsl	1005	S/B N45	780	8.5
	9	dsl	1700	Beth 650	1100	16
GRAHAM						
Jay-Lan Corp	3	dsl	3406	Wils 42	825	5/5''
GRAY						
Hudson Drlg, Leonard	7	dsl	900	Unit U15	900	11.5
GRAYSON						
Atco Drlg Southern	53	dsl	1600	Nat 610UE	800	12
Jones Drlg Corp	9	gas	816		800	14
Moran Drlg, E W	1	dsl	1600	G-D 700	800	13
	3	dsl	1300	G-D 700	800	13
	6	dsl	900	Beth S55	400	10
	17	dsl	1425	Wils 250	2000	22
Noble Drlg	N-87	dsl	1200	Nat 80B	1200	15
Viersen & Cochran Drlg	19	dsl	1200	Nat 610	850	12.5
GREGG						
Butler-Johnson	14	d-e	2000	G-D 1100E	2000	20
Challenger Drlg	20	dsl	900	S/B N75	1000	12
Delta Drlg	69	dsl		S-H 7000	480	9
Dixon Drlg	7	dsl	1700	S/B N46	950	13
Henley Drlg	6	dsl	2000	Emsco D3	1850	15
	9	dsl	4000	Emsco C2	2000	25
Lester Drlg, Dan	9	dsl	1500	Olwl 760	1500	16
GRIMES						
Moran Bros	175	el		MC 1220EB		25
Spartan Drlg	4	d-e	600	Sup 700E	700	10
GUADALUPE						
Nixon Drlg	3	dsl	300	Crdw	300	4
HALE						
D B Drlg	3	dsl	505	S/B N4	450	8
HANSFORD						
Baker & Taylor Drlg	9	dsl	870	MC U15	870	11
Sage Drlg	7	dsl	350	BDW 450	500	9
Service Drlg	4	dsl	500	MC U15	800	9.2
HARDEMAN						
Bearden Drlg	8	dsl	1200	Wils 75	900	9.5
Bennett Prod Corp	2	dsl	900	MC U15	900	13
	3	dsl	900	MC U15	900	13
	4	dsl	900	Permian 1000	900	13

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Burns Drlg	6	dsl	1300	MC U36A	780	14
	7	dsl	1020	Unit U15	744	10

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
HARDEMAN (Cont'd)						
Dual Drlg	5	dsl	1200	Wils Mogul	600	9.5
Lee Drlg	1	dsl	1100	BDW 450T	500	9
	2	dsl	850	BDW 450T	550	9
	3	dsl	1100	BDW 450T	700	9
Mercury Drlg	4	dsl	1500	MC U15	950	12
Moran Drlg, E W	19	dsl	1400	Wils 75	900	11
	23	dsl	1400	Wils 75	900	11
Schlensker Drlg	2	gas	700	Beth MC450	900	12
	7	dsl	800	Unit U15	950	9.5
Theiss Drlg	1	dsl	1450	S/B N46	1020	12
	2	dsl	1450	Emsco U15	1020	12
HARDIN						
Frio Drlg	1	dsl	800	Emsco 350	550	9.5
Goldrus Drlg	18	dsl	1700	1000 Cbot	872	14
Richards Drlg Co	8	dsl	2500	Olwl 860	2400	18
HARRIS						
Challenger Drlg	29	dsl	720	Nat T45	860	9.5
	37	dsl	2400	Idco 2500	2400	28
Hanl.ig & Young Drlg	201	d-e	2600	S/B NE95	1700	19
	202	d-e	2600	S/B NE95	1700	19
Penrod Drlg	134	dsl	3200	Nat 1625DE	2000	30
Rainbow Drlg	6	dsl	1600	Cbot 900	900	11
Wilson Bros Drlg	18	dsl	1300	Nat 110	3300	20
HARRISON						
Globe Drlg	6	dsl	700	Emsco C50	700	10
Lester Drlg, Dan	8	dsl	1850	Olwl 760	1500	16
Lohmann Drlg	17	gas	800	MC U15 BN356	600	10
Sawyer Drlg & Serv	11	dsl	600	Wils Giant	400	9
Schlensker Drlg	6	dsl	950	MC U15	950	10
HARTLEY						
Service Drlg	9	dsl	1000	MC 800	800	10
HASKELL						
Bearden Drlg	1	dsl	1200	Wils Mogul Super 42	750	9
Hack Drlg	3	dsl	350	Beth S45E	350	7
Sojourner Drlg	2	dsl		MC U15	550	7
HEMPHILL						
Baker & Taylor Drlg	8	dsl	870	MC U15	870	11
Bonray Drlg	21	dsl	900	Idco H750	660	12
Helmerich & Payne	54	dsl	1100	Olwl 76	1210	16
	85	d-s	1700	Olwl 760E	760	16
Moran Bros	68	el	3200	Emsco C2	2000	25
Moran Drlg, E W	13	dsl	1450	G-D 700	800	13
Service Drlg	12	dsl	1000	Emsco D2	800	12
Triad Drlg	6	dsl		S/B N95A	1650	20
Unit Drlg & Expl	14	dsl	1000	G-D 700	1300	16
Zenith Drlg	5	dsl	1200	BDW 800	800	16
	9	dsl	1200	G-D 800	1200	16.5
HENDERSON						
Delta Drlg	90	d-e	2000	Emsco D3 Type II	2592	16
Hinton Drlg, W B	7	dsl	1600	Nat 80B	1650	15
Maxwell Herring Drlg	3	dsl	1350	G-D 800	1350	13.5
	21	dsl	1709	S/G N75A	1059	13
Murco Drlg	38	d-s	1700	Olwl 660E	700	12
HIDALGO						
Atco Drlg Southern	18	d-e	2000	Nat 80UE	1000	15
Blocker Drlg	17	dsl	825	S-H	530	7
Butler-Johnson	9	dsl	1200	G-D 700	1200	12
Delta Drlg	58	d-s	2600	Emsco C1 Type II	3456	18
Dixilyn-Field Drlg	23	dsl	2800	Olwl 860	2331	18
	24	dsl	2800	Olwl 860	2331	18
Harkins & Co	5	dsl	1200	Cbot 750	650	9.5/4''
	7	dsl	1650	Nat 110	1650	16/5''
	11	dsl	1260	S/B N75	1260	12.5
Magee-Poole Drlg	1	dsl	1500	Cbot 900	950	11/4''
	5	dsl	1500	Cbot 900	950	11/4''
Resource Drlg	RD-24	dsl	2330	Nat 110	2740	18
	RD16	dsl	1560	Nat 80B	1835	14
	RD8	dsl	2330	Nat 110	2740	18
Willis Drlg	1	dsl	750	Emsco 450	1000	12
	2	dsl	750	Emsco 450	1000	12
	4	dsl	1000	S/B N85	1200	15
HILDAGO						
Williams Drlg of South TX	3	dsl	800	Idco BIR8085	950	11.5/4''
HOCKLEY						
D & R Drlg	1	el	1600	Nat 3410FE	1600	17
Norton Drlg	1	dsl	450	Wils 65P	850	10

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
HOCKLEY (Cont'd)						
Rod Ric	11	dsl	450	Nat T20	440	7
Sharp Drlg	47	dsl	790	Beth M58	988	13.5
Sitton Drlg	1	dsl	450	Wils 600	525	6.5
	5	dsl	450	Wils 75P	900	11.5
	6	dsl	650	Wils 75P	900	10
	8	dsl	650	Wils 75P	900	10
Tri-Service Drlg	8	g-b	750	Olwl 76	750	13
Verna Corp	1	dsl	600	S/B N55	800	12.5
	3	dsl	500	S/B N45	500	6.5
	4	dsl	500	S/B N4	500	6.5
	5	dsl	500	Wils Mogul	500	6.5
	6	dsl	550	S/B N55	800	12
	7	dsl	700	MC U15 Type	800	11
	8	dsl	500	Idco H40	500	6.5
	9	dsl	600	Idco H40	500	6.5
	33	dsl	550	MC U15	800	9
	36	dsl	550	MC U15	550	11
	39	dsl	600	MC U15	550	11
Willbros Drlg	7	dsl	1400	Emsco A800	1400	16
HOUSTON						

SPARTAN
DRILLING
(713) 955-0625 (409) 775-7071
(303) 293-8006 (406) 482-6470
(403) 262-7778

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Forex Neptune and/or Affil	46	d-e	3200	G-D 1500E	2000	21.7
Helmerich & Payne	87	d-e	800	Nat 1625ME	3000	30
Henley Drlg	7	dsl	4000	Emsco C2	2000	25
Nicklos Drlg	70	d-e	1700	Olwl 760E	2000	15
Nowotny & Conley Drlg	7	dsl	1600	Nat 610	1000	12.5
Parker Drlg	129-HH/17	dsl	1500	OIME TBA2000	2000	20
	133-HH/21	dsl	1500	OIME TBA2000	2000	20
Rosamond Drlg	9	dsl	2300	G-D 700	1230	14
Sloan Drlg	22	dsl	440	Mac 300	450	7
HOWARD						
GCO Drlg	6	dsl	820	BDW 650M	650	9
Riley Drlg	3	dsl	300	MC U34	225	4
TMBR Drlg	6	dsl	700	Nat 75CA	750	12
Wes-Tex Drlg	16	dsl	335	S/B N4	500	8
HUTCHINSON						
Cheyenne Drlg	5	dsl	400	Nat T-20	450	5
Diatom Drlg	2	dsl	630	I-R 600	650	10
Service Drlg	1	dsl	300	MC U34	300	4.5
	14	dsl	400	PR-1000	800	9
IRION						
D B Drlg	11	dsl	720	Nat T32	575	8.5
FWA Drlg	12	dsl	910	Wils Giant	900	10
	14	dsl	900	Wils Mogul 42	600	7.5
GCO Drlg	8	dsl	1000	Nat 370	650	10.4
Transcontinental Drlg-San Angelo	34	dsl	674	Beth S55	650	8
Tucker Drlg	2	dsl	750	Emsco GB500	750	10
	6	dsl	750	S/B N75	750	12
	12	dsl	750	Nat 50A	750	10
Wes-Tex Drlg	2	dsl	650	Beth S45E	650	10
JACK						
Burns Drlg	9	dsl	550	Hoop GTXXA	425	6.5/4''
Megargel Drlg	2	dsl	750	MC U15	750	7
JACKSON						
Delta Drlg	63	d-e	2600	Emsco C1 Type II	2592	16
M N D Drlg-Southern	14	d-e	1820	MC U712	1200	16
Padre Drlg	6	dsl	500	S/B H4210	400	7.5
PRC Drlg	8	dsl	2331	S/B N95A	2331	18
	9	dsl	1790	RMI 4610	1040	14
	10	dsl	1084	Coop LTO700	550	16
Southland Drlg	4	dsl	1450	S/B N7		10
JEFFERSON						

KELLEY
ONSHORE DRILLING CO.

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Big Chief Drlg	11	dsl	1350	S/B N75	1350	13
	22	gas	1600	Nat 80B	1600	14
	25	dsl	3000	Nat 110	2000	20
	35	gas	2610	Nat 110	2610	20
	44	dsl	2400	S/B N95	2400	20

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
JEFFERSON (Cont'd)						
Drillers	5	dsl	900	MC U15M	1200	11
	15	dsl	1000	Olwl 66	800	12
	30	dsl	800	Unit U15M	1000	11
	39	d-e	1200	Idco 700E	1000	14
Eljay Drlg	1	d-e	2800	Olwl E2000	2000	25
Goldrus Drlg	4	dsl	1200	S/B N75	1040	14
Moran Bros	172	dsl		Nat 110M		15
Nicklos Drlg	74	d-e	2800	Olwl E2000	2000	25
Pozos Intl Drlg Serv	81	dsl	1890	S/B N46	940	12.5
Rosamond Drlg	8	dsl	2475	Nat 130	2475	20
JIM HOGG						
Atco Drlg Southern	57	d-e	1000	Nat 610UE	800	12
Challenger Drlg	46	dsl	900	Idco 750	900	10
Cinco Drlg	12	d-e	3000	Nat 1320UE	2400	24
Delta Drlg	95	d-e	2900	Emsco CI Type II	3456	20
Penrod Drlg	124	dsl	1600	Nat 1625M	3000	30
JIM WELLS						
Alanco Drlg	1	dsl	800	Idco H40	500	8.5
Blocker Drlg	2	dsl	1130	Cbot 750	650	9.5
	3	dsl	1820	Cbot Expl III	950	12
	4	dsl	1800	Nat 55	1500	12
	14	dsl	2500	Nat 110	2730	20
	15	dsl	1265	Cbot 900	950	10
Dixilyn-Field Drlg	2	dsl	1600	S/B N7.5	1040	12
	9	dsl	2650	Nat 130	2331	20
	10	dsl	1295	Nat 55	1040	12
	12	dsl	2600	Nat 110M	2331	18
Harkins & Co	12	dsl	1050	Cbot 750	650	9.5/4"
Magee-Poole Drlg	6	dsl	2000	OIME SL7	1300	16.8
	14	dsl	1475	Cbot Explorer III	700	9/4"
	15	dsl	1475	Cbot Expl III	700	9/4"
Murlynson Drlg	10	dsl	1000	MC U15	600	10
Murphy Drlg, Pete	1	dsl	800	Crdw C Horse	300	6
Pearl Expl	2	dsl	600	Wils 65	600	8.5
JONES						
Bandera Drlg	2	dsl	470	MC U34	360	6.5
Dixon Drlg	8	dsl	900	S/B N42	650	8
	10	dsl	900	S/B N46	950	10
	11	dsl	700	Nat T20	450	7.5
KARNES						
Strike Drlg	1	dsl	1350	MC U914C	1820	22
KAUFMAN						
Cape Drlg	6	dsl	1500	MIDWAY 750D	800	13.5
Gibson Drlg	2	dsl	526	Wils Mogul 65	398	5
KENEDY						
Cinco Drlg	14	d-e	2400	OIME SD5	1500	14
Southland Drlg	7	dsl	1450	S/B N55		10
Willis Drlg	7	dsl	1350	S/B N95	2400	20
	8	dsl	1000	BDW 800	1000	12
KENT						
Verna Corp	10	dsl	700	MC U36A	1200	12
KERN						
Frio Drlg	3	dsl	900	S/B N55	900	10.5
KING						
Bandera Drlg	4	dsl	925	BDW 450T	540	8.5
Mesa Drlg	1	dsl	725	TSM 6000	450	7.5
Nixon Drlg	4	dsl	300	Stuart	300	4
Texzona Drlg	1	dsl	475	MC U34B	450	6.5
Wes-Mor Drlg	1	dsl		MC U15		8
	4	dsl	400	MC U15		7.5
	5	g-b	465	MC U15	290	7.5
KLEBERG						
Harkins & Co	14	dsl	1150	Cbot 900	900	11/4"
Magee-Poole Drlg	4	dsl	1500	Cbot 900	950	11/4"
Willis Drlg	5	dsl	7500	S/B N75	1000	12
LA SALLE						
Atco Drlg Southern	61	d-e	2600	Emsco IIC	2000	20
Bearden Drlg	3	dsl	1200	Wils Mogul Super 42	750	9.5
LAVACA						
B D K Drlg	10	dsl	1000	S/B N46	900	10
Harkins & Co	10	dsl	1620	Emsco B1013	1620	16
Howell Drlg	1	dsl	1000	Cbot 900	900	11
	2	dsl	1550	Cbot 1200	1130	15
Magee-Poole Drlg	2	dsl	1500	OIME 750SL	1155	14
Spartan Drlg	17E	d-e	1000	Olwl 780E	1000	16
	18UE	d-e	800	Sup 700E	700	12

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
LEE						
Challenger Drlg	34	dsl	1200	S/B N75	1500	12
	48	dsl	1000	Unit U36	1000	13
M G F Drlg-Houston	8	dsl	600	S/B N55	550	10.5
M G F Drlg-Midland	8	dsl	800	MC Rig U15	800	10
Resource Drlg	RD-20	dsl	1040	Nat 610	1220	12
	RD19	dsl	1040	Nat 610	1220	12
Spartan Drlg	15E	d-e	600	Sup 700E	700	12
Sterling Drlg	10	dsl	1400	S/B N75	1100	13
LEON						
Big 6 Drlg	8	d-e	1600	Nat 610	900	12
Grace France Drlg	7	dsl	1300	G-D 500	800	11
Hinton Drlg, W B	11	d-e	2600	Nat 1320UE	3000	25
Thunderbolt Drlg	50	dsl	1750	Cbot 1200	1300	13.5
LIBERTY						
Aguila Drlg	11	mch	250	Trailer Mounted		8
Big 6 Drlg	6	dsl	800	Cbot	950	12
Challenger Drlg	36	dsl	650	Nat G45	700	9.5
Cliffs Drlg	31	dsl	2600	Nat 110	2475	20
Loffland Bros	118	d-e	3300	MC U1220EBD	3300	25
Moran Bros	171	dsl		MC U712		15
Richards Drlg Co	2	dsl	1500	S/B N75	1200	12.5
Wilson Bros Drlg	12	dsl	1850	Nat 110	1850	16
LIMESTONE						
Butler-Johnson	2	dsl	1600	S/B N85	1900	15
Grace France Drlg	4	dsl	1300	G-D 500	800	11
M N D Drlg-Southern	2	dsl	1794	S/B N75	1024	14
LIPSCOMB						
Hudson Drlg, Leonard	1	dsl	900	MC U15	900	11.5
	5	dsl	900	S/B N7	900	11.5
Mercury Drlg	11	dsl	1500	Emsco U15	950	9
Sage Drlg	8	dsl	500	BDW 650	500	12.5
Service Drlg	5	dsl	1000	MC U15	800	10
Slawson Drlg	6	dsl	380	Idco H525	480	8.5
Triad Drlg	14	dsl	1150	U-15	800	10
Unit Drlg & Expl	1	dsl	500	MC U15	800	11
	7	dsl	500	MC U15	800	11
LIVE OAK						
Atco Drlg Southern	59	d-e	2600	Emsco 11C	2000	18
Blocker Drlg	8	dsl	1820	Cbot Expl III	1400	14
Frio Drlg	5	d-e	1000	Idco ED1200	1200	16
FWA Drlg	25	dsl	2000	Wils 120	1560	16
Loffland Bros	104	d-e	3300	Emsco 3000	3300	35
Magee-Poole Drlg	9	dsl	2350	Cbot	1500	16

NICOR Drilling Company
(918) 587-5507

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Nicor Drlg	51	d-m	1680	Idco H900M	1000	15
LOVING						
Cactus Drlg	2	dsl	2200	Nat 110 M	2550	20
	30	dsl	2000	Nat 110	1650	20
Cliffs Drlg	27	dsl	2600	Nat 1320	2475	25
Loffland Bros	112	d-e	3300	MC U1220EB	2200	25
Parker Drlg	39	gas	1600	OIME Hercules 2500M	1600	23
	184	d-e	3000	OIME E3000	3000	30
Rowan Drlg	8	dsl	2600	MC U1220S	2400	25
Santa Fe Drlg	SFW-16	d-e	1300	Emsco C11	2000	25
Sharp Drlg	43	dsl	2331	Olwl M2000	2742	30
	60	d-e	3108	Emsco C3 Type II	3656	30
	66	d-e	2331	MC U1220EB	2742	30
Sterling Drlg	3	dsl	800	Nat 370	770	9
LUBBOCK						
D B Drlg	1	dsl	550	S/B N4	450	80
	23	dsl	125	Unit U15	800	10
	24	dsl	800	Beth S45E	575	8.5
Norton Drlg	4	dsl	550	Wils 75	850	10.5
TMBR Drlg	22	dsl	700	S/B N75	750	14
LYNN						
Norton Drlg	11	dsl	550	Wils 75	900	12
MADISON						
M N D Drlg-Southern	6	dsl	1540	G-D 500	770	10.5
Nicklos Drlg	69	d-e	1500	Olwl 660E	1000	12.5
Pozos Intl Drlg Serv	80	dsl	1890	S/B N46	940	12.5

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
MARION						
Nowotny & Conley Drlg	4	dsl	1600	Nat 610	1000	12.5
Sawyer Drlg & Serv	2	dsl	400	S/B N4	400	8.5
MARTIN						
Cactus Drlg	9	dsl	900	S/B N75	1200	13
	25	dsl	1450	Idco L711	110	12
FWA Drlg	11	dsl	1065	Wils Giant	900	11
Hurt & Assoc, Clint	10	dsl	1200	Wils 75	900	11
	11	dsl	1200	Wils 75	900	11
Moran Drlg, E W	7	dsl	1600	G-D 700	800	13
Resource Drlg	RD-23	dsl	1040	Nat 610	1220	12
	RD-25	dsl	1560	Nat 80B	1835	14
Robinson Drlg of Texas	6	dsl	950	S/B N75	1350	12.5
Tahoe Drlg	2	dsl	500	Emsco D2	500	11.2
TMBR Drlg	4	dsl	840	Nat 50CA	600	10.5
	24	dsl	1100	G-D 700	1100	14
Wes-Tex Drlg	20	dsl	600	Nat 50CA	900	10
MATAGORDA						
Cliffs Drlg	42	d-e	2600	Nat 1320UE	3025	25
Delta Drlg	101	d-s	2600	Emsco C1 Type II	2730	20
Nicor Drlg	48	d-e	2700	MC U1220EB	2000	25
Padre Drlg	8	dsl	700	S/B H14610	750	10
Resource Drlg	RD14	dsl	2330	Nat 110	2740	18
	RD4	dsl	1560	Nat 80B	1835	14
Richards Drlg Assocs	11	dsl	2500	Olwl 880	2400	18
MC MULLEN						
B D K Drlg	9	dsl	1480	S/B N75	1000	12
Buzzini Drlg	11	dsl	1700	Olwl E3000	3000	30
Dixilyn-Field Drlg	25	d-e	1600	Nat 80UE	2000	15
Harkins & Co	3	dsl	1260	S/B N75A	1260	12.5
Helmerich & Payne	37	dsl	2835	Olwl M2000	2835	22
Magee-Poole Drlg	8	dsl	1500	Cbot 900	950	11/4"
Moran Bros	173	el		MC U914EC		20
PRC Drlg	3	dsl	2237	S/B N46	1480	11.5
Santa Fe Drlg	SFW-14	d-e	3200	Emsco C3111	3000	30
MIDLAND						
Britton Inds Drlg	1	dsl	1000	Olwl 76	800	15
	2	dsl	1000	Nat 50CA	1000	12
	4	dsl	1000	Nat 50CA	1000	13
Cactus Drlg	1	dsl	2000	Nat 110M	1650	20
	4	dsl	950	Nat 55M	1100	13
	7	dsl	1400	Olwl 76	1650	14
	11	dsl	850	Emsco G350	1050	8.5
	15	dsl	1050	Beth 650	1200	15
	31	dsl	2000	Nat 1320	2550	25
	32	dsl	2000	Nat 1320	2550	25
	34	dsl	700	Nat 75	1200	12
	59	dsl	550	S/B N4	454	6
	65	dsl	550	S/B N4	454	6
Cherokee Drlg & Dev	6	dsl		BDW 450	670	7
	7	dsl	1500	BDW 650	1050	12
Drillers	24	dsl	900	S/B N55	900	12
FWA Drlg	2	dsl	1100	Wils Super Giant	1040	13
	9	dsl	1150	Wils Giant	720	11.5
	21	dsl	1000	Wils Mogul 42	720	10
Grace/T R G Drlg	301	dsl	1000	Wils 75	900	12
Holliday Drlg	1	dsl	1200	G-D 700	1200	13
	2	dsl	1000	Olwl 76	1000	13
M G F Drlg-Midland	23	dsl	1150	Olwl 76	1150	13.5
	25	dsl	1725	S/B N95	1725	19
	201	dsl	1600	Nat 1320UE	2000	30
	202	dsl	1600	Nat 1320 UE	2000	30
	203	dsl	1300	Nat 110UE	2000	20
Robinson Drlg of Texas	2	dsl	750	MC U15	900	10
Sharp Drlg	62	dsl	1132	Emsco D3	1272	14
Tri-Service Drlg	5	g-b	1800	Olwl 760	1400	16
TMBR Drlg	16	dsl	700	Nat 50CA	600	10.5
	23	dsl	1100	Nat 75CA	1100	14
	29					
Wilson Bros Drlg	8	dsl	1750	Nat 110	1750	16
MITCHELL						
GCO Drlg	2	dsl	640	BDW 450	450	8
Moran Bros	54	dsl	970	Nat T20	300	6
Riley Drlg	4	dsl	300	Cbot	300	4.5
MONTAGUE						

L.D. BURNS DRILLING COMPANY
One Parker Square, Suite 500
(817) 723-0512
Wichita Falls, Texas 76308

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Burns Drlg	4	dsl	882	Wils 75	780	12/4"

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
MONTAGUE (Cont'd)						
Originala Drlg	2	dsl	400	Wils Giant	400	7
Schlensker Drlg	4	gas	700	MC U15	800	10
Schlensker Drlg	14	d-e		MC U122	2500	25
MONTGOMERY						
Delta Drlg	80	dsl	1300	S-H 7000	480	9
M N D Drlg-Southern	3	dsl	1794	S/B N75	1024	12.5
	7	dsl	1540	BDW 800	770	10
	9	dsl	1540	G-D 500	770	10.5
	10	d-e	1820	S/B N95	1820	20
	15	d-e	2000	MC U712	1200	16
Nixon Drlg	2	dsl	300	Crdw	300	4
Pozos Intl Drlg Serv	581	dsl	3000	S/B N12A	2850	25
Resource Drlg	RD15	dsl	1560	Nat 80B	1835	14
Southland Drlg	6	dsl	1100	Cbot		8.5
MOORE						
Baker & Taylor Drlg	10	dsl	700	Emsco GB250T	465	6
Distom Drlg	1	dsl	456	I-R 550	574	7.5
Service Drlg	7	dsl	300	Beth S45	300	5.5
NACOGDOCHES						
Exeter Drlg Southern	57	dsl	1500	Emsco D3	1500	16
Rainbow Drlg	3	dsl	1600	Cbot 900	900	11
Rosamond Drlg	6	dsl	1275	Emsco A550	1275	12.5
Schlensker Drlg	9	dsl	1500	OIME 1500SL	2205	18
Southland Drlg	2	dsl	1750	S/B N75A		12
Wheless Drlg	4	dsl	1800	Emsco J1100	1800	16
NAVARRO						
Spartan Drlg	12	d-e	560	Sup 700E	700	10
NOLAN						
Wes-Tex Drlg	14	dsl	335	S/B N4	500	8
NUECES						
Cothrum Drlg	1	dsl	774	Emsco 350	636	9.5
Willis Drlg	3	dsl	750	S/B N75	1000	12
OCHILTREE						
Baker & Taylor Drlg	12	dsl	870	MC U15	870	11
Hudson Drlg, Leonard	3	dsl	900	MC U15	900	11.5
	4	dsl	900	MC U15	900	11.5
	6	dsl	550	S/B N7	900	12
Jones Drlg Co, Loyd	86	dsl	1200	Cbot 750	750	10
Lanex Drlg	C-8	d-s	1800	BDW 650	650	12
Mercury Drlg	2	dsl	1500	MC U15	950	12
Moran Drlg, E W	24	dsl	1200	S-H 7000	400	9.5
Sage Drlg	3	dsl	350	Idco H40	500	8
Service Drlg	13	dsl	400	MC U1500	800	12
Unit Drlg & Expl	19					
Zenith Drlg	3	dsl	1000	S/B N7A	800	12.5
OLDHAM						
Baker & Taylor Drlg	1	dsl	870	MC U15	870	10
ORANGE						
Delta Drlg	31	dsl	2300	Emsco C1 Type III	2592	20
Dixilyn-Field Drlg	11	dsl	2600	Nat 110M	2331	18
PALO PINTO						
Megargel Drlg	16	dsl	500	Shaf S8000	500	8
PANOLA						
Butler-Johnson	3	g-b	1200	Emsco A550	1200	13.5
	7	dsl	1100	Nat 55	1100	120
Nowotny & Conley Drlg	3	dsl	1750	S/B N46	1000	12.5
Rosamond Drlg	5	dsl	1275	Beth MC450	1275	12.5
	12	dsl	850	S/B N46	850	10
PARKER						
Wes-Mor Drlg	7	dsl	680	MC U34	680	7.5
PECOS						
Cherokee Drlg & Dev	2	dsl	1150	Wils 75	900	11
	4	gas	1150	Wils 75	900	11
Delta Drlg	36	dsl	2800	Emsco C2 Type III	2331	23
Dual Drlg	19	dsl	2100	Olwl 760	1000	16
Grace/T R G Drlg	22	dsl	1290	Nat 80B	1305	16
Henley Drlg	8	dsl	2000	Emsco D3	1850	15
Kenai Drlg	18	dsl	410	Idco H35	450	6.5
Loffland Bros	77	dsl	1450	Nat 100	1575	15
Parker Drlg	16	gas	1000	Olwl 76	1000	16
	74	gas	1400	Nat 100M	1400	22.5
	87	gas	1800	Idco E2000	1800	25
	88	d-e	2700	Nat 130	3000	30
	121	d-e	2700	Idco E3000	3000	30

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
PECOS (Cont'd)						
Penrod Drlg	114	dsl	1600	Nat 1625M	3000	30
	121	dsl	1600	Nat	3000	30
Quarles Drlg	6	dsl	2000	S/B N95	2200	22
Resource Drlg	RD2	dsl	1560	Nat 80B	1635	14
Sharp Drlg	32	dsl	1185	Emsco 800	1482	16.5
	34	dsl	2331	Beth 1013	2742	30
	64	dsl	1560	Olwl 760	1836	18
	67	dsl	2331	MC U914C	2742	23.5
	73	d-e	4250	Emsco C3	4640	30
Wes-Tex Drlg	7	dsl	335	S/B N4	480	8
POLK						
Cliffs Drlg	28	dsl	2800	Nat 1320	2475	25
	32	dsl	2800	Nat 110	2475	20
	41	dsl	2800	Nat 1320	2475	25
Delta Drlg	6	dsl	2800	Emsco C1 Type III	2592	22
POTTER						
Baker & Taylor Drlg	11	dsl	1140	Emsco GCA500	1140	12
Service Drlg	6	dsl	300	MC U34	300	4.5
	11	dsl	400	MC U34	400	5
RAINS						
Delta Drlg	44	dsl	2000	S/B N95	1560	16
REAGAN						
Big Chief Drlg	9	dsl	1200	Idco H35S	700	10
	24	gas	1200	MC U15	900	11
BJM Drlg & Expl	3	dsl	1200	Nat 150AC	1000	12
	5	dsl	600	MC U15	600	12
D B Drlg	8	dsl	1025	Beth S55	800	10
	14	dsl	1210	Nat 50A	850	11.5
Dual Drlg	30	dsl	1250	Olwl 500	800	9
FWA Drlg	1	dsl	1300	Wils Giant	900	11
	4	dsl	1365	Wils Giant	900	11
	8	dsl	1065	Wils Giant	900	11
	17	dsl	1400	Wils Giant	900	11
Penrod Drlg	101	dsl	1684	S/B N46	1060	10
	102	dsl	1600	Nat 610M	964	16
Tahoe Drlg	1	dsl	550	Nat 50	550	11.2
Transcontinental Drlg-San Angelo	30	dsl	750	S/B N55	750	10
	33	dsl	898	Unit U15	850	8.5
Wes-Tex Drlg	12	dsl	335	S/B N4	500	8
RED RIVER						
Delta Drlg	15	dsl	1800	Emsco D3 Type III	1040	13.5
	74	dsl	1000	S-H 7000	480	9
REEVES						
Cactus Drlg	56	dsl	600	Idco H35	670	6.5
Henley Drlg	2	dsl	4000	Emsco C2	2000	25
Kenai Drlg	13	dsl	800	Emsco GA250T	400	6.5
	20	dsl	900	Emsco GB250T	400	6.5
Sharp Drlg	59	dsl	2331	Beth MC850	2742	23
	72	d-e	2160	Olwl 840E	2430	22
Willbros Drlg	9	d-s	3000	Idco E1700	3000	25
Wilson Bros Drlg	20	dsl	800	Nat 80B	1425	16
REFUGIO						
Big 6 Drlg	3	dsl	750	Cbot	600	11
J & C Drlg	9	dsl	1050	Wils 600	630	9
San Patricio Corp	7	dsl	1000	S/B RR800	400	8
ROBERTS						
Bravo Drlg	3	dsl	870	BDW 800	870	14
Hudson Drlg, Leonard	2	dsl	900	MC U15	900	11.5
ROBERTSON						
Hinton Drlg, W B	6	dsl	1600	Nat 80B	1650	15
Loffland Bros	322	dsl	1800	G-D 800	2100	16
M N D Drlg-Southern	4	dsl	1540	G-D 1100	1540	18
Maxwell Herring Drlg	19	dsl	2475	G-D 1100	2475	20
Moran Bros	33	el	2380	Nat 110UE	1500	20
Schlensker Drlg	21	d-e	1300	G-D 1100E	1500	20
RUNNELS						
Hack Drlg	2	dsl	300	S/B N4	350	7
Lange Drlg, LeRoy	1	dsl	225	Jaswell	525	3.5
Morrison Drlg & Prod	101	dsl	72.5	Nat T20	475	6
Safari Drlg	2	dsl	370	Crdw L350	370	7
Sojourner Drlg	1	dsl		MC U15	550	7
RUSK						
Gibson Drlg	9	dsl	1030	Wils Mogul 75P	700	9
	11	dsl	1200	Emsco D2	1200	12
Globe Drlg	3	dsl	800	MC U15	800	12
	7	dsl	3000	G-D 1100	1500	20
	8	d-e	3000	G-D GD1000	1500	20

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
RUSK (Cont'd)						
Loffland Bros	203	dsl	1140	MC U15	1000	10
Maxwell Herring Drlg	15	dsl	1475	S-H 7000	510	10
Woolf & Magee	2	dsl	1560	G-D 700	1000	13.5
SABINE						
Challenger Drlg	47	dsl	700	G-D 500	600	8
SAN PATRICIO						
Blocker Drlg	9	dsl	1115	Idco H1000	950	10
M N D Drlg-Southern	12	d-e	1820	MC U712	1200	16
Moran Bros	39	el	2000	Emsco C1 Type II	1580	20
SCHLEICHER						
Tucker Drlg	10	dsl	750	S/B N45	750	7.5
TMBR Drlg	15	gas	700	MC U15	500	10.5
Wes-Tex Drlg	6	dsl	650	Beth S60	700	10
SCURRY						
D B Drlg	2	dsl	910	Nat T32	450	8.5
McCutchen Drlg	3	dsl	830	Wils Atlas Roadster	830	10.5
	4	dsl	820	Wils 90	820	12
Riley Drlg	2	dsl	300	Nat	300	4.5
Wes-Tex Drlg	21	dsl	350	MC U34	450	7
SHACKELFORD						
Bandera Drlg	6	dsl	850	MAC 300	475	7.5
	7	dsl	750	MAC 300	400	7.5
Bearden Drlg	5	dsl	1200	Wils 75	900	9.5
Jones Drlg Co	51	dsl	425	S/B N4	425	6
Sojourner Drlg	5	dsl	250	MC U15	550	7
SHELBY						
Gibson Drlg	12	dsl	900	Emsco D2	900	12
SHERMAN						
H30 Drlg	8	dsl	600	Idco H40	600	10
SMITH						
Delta Drlg	5	dsl	2000	Nat 100	1560	16
	22	dsl	1800	Emsco D3 Type III	1563	14
	40	dsl	1900	Emsco D2 Type III	784	11
	54	dsl	2000	Nat 80B	1560	14
	64	dsl	1900	Emsco D2 Type III	784	11
FWA Drlg	33	dsl	1750	G-D 700M	1040	12
Gibson Drlg	3	dsl	820	Wils Mogul 42	666	6.5
	10	dsl	1200	Emsco D2	1200	12
Henley Drlg	1	dsl	2000	OIME SL1000	1500	14
Hinton Drlg, W B	8	dsl	1300	S-H 7000	400	10

KELLEY ONSHORE DRILLING CO.

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Kelley Onshore Drlg	11	d-e	1700	Olwl 750	750	12
Maxwell Herring Drlg	2	dsl	2400	Beth M810	2400	14.4
	12	dsl	1500	Wils 150A	2500	15
	18	dsl	2700	G-D 1100	2700	20
Noble Drlg	N-58	dsl	800	Nat 55	800	12
	N-812	dsl	1420	Nat 80B	1420	15
Penrod Drlg	18	dsl	2250	Nat 1625M6	2200	10
Rosamond Drlg	10	e-s	560	Olwl 500	[illegible]	10
Schlensker Drlg	3	dsl	700	Olwl 700	1500	14
Verna Corp	21	dsl	550	MC	600	10
	22	dsl	550	MC U15	800	10
	23	dsl	550	MC U15	800	10
	24	dsl	550	MC U15	600	10
	25	dsl	1000	MC U15	600	10
	27	dsl	1000	MC U15	800	10
	29	dsl	1000	MC U15	800	10
	30	dsl	560	MC U15	800	10
	32	dsl	1212	Verna U15	500	11
	35	dsl	1000	Idco 711SJ	1200	14
	37	dsl	1212	MC U15	550	11
STARR						
Alenco Drlg	3	dsl	1425	Idco H1000	875	11
Bawden Int'l	7	dsl	1200	Nat 55	700	11.5
Harkins & Co	1	dsl	1800	Emsco C Type III	1800	18/5"
	2	dsl	1500	S/B N95	1500	14
	4	dsl	1260	S/B N75A	1260	12.5
San Patricio Corp	5	dsl	1000	Shaf 800	800	9
Wilson Bros Drlg	15	dsl	2800	Nat 110	2700	20
STEPHENS						
E & H Drlg	2	dsl	400	MC U34	325	6
	6	dsl	600	Wils Mogul	350	6.5
Lowe Drlg	2	dsl	475	MC U34	475	6
Sealy & Co	1	dsl	80	G-D 1500		1.5

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
STERLING						
Bandera Drlg	11	dsl	925	BDW 450T	540	9
Hondo Drlg	1	dsl	700	MC U15	700	15
Robinson Drlg of Texas	5	dsl	750	MC U15	900	9.5
Tucker Drlg	8	dsl	550	Idco H40	550	9
TMBR Drlg	8	dsl	700	Nat 50CA	800	10.5
Wes-Tex Drlg	1	dsl	680	Nat 50A	650	10
	3	dsl	700	Nat 50A	700	10
	11	dsl	450	Beth S56	700	10
STONEWALL						
Morrison Drlg & Prod	103	dsl	925	Idco H36	550	7.5
SUTTON						
D B Drlg	22	dsl	750	Unit U34	450	7
Delta Drlg	73	dsl	580	S-H 7000	440	9
TMBR Drlg	11	gas	580	MC U15	500	10
Wes-Tex Drlg	8	dsl	335		500	8
TAYLOR						
Herb Expl	1	g-b		Fail 1500	10	15/ 2.38"
Lynx Drlg	2	dsl	500	Idco H30	380	7
	4	dsl	750	TSM-6000	540	9
TERRELL						
Parker Drlg	80	gas	1600	Nat 1320	1800	23
Rowan Drlg	12	dsl	2000	Nat 1320M	2100	18
TERRY						
GCO Drlg	3	dsl	820	BDW 650M	650	12
Kenai Drlg	14	dsl	700	Emsco GC350	700	11.5
Norton Drlg	8	dsl	550	Wils 75	900	14
THROCKMORTON						
Ashtola Drlg	1	dsl	800	MC U15	600	7.5
Bandera Drlg	1	dsl	750	MAC 300	475	7.5
E & H Drlg	1	dsl	700	MC U15	700	7.5
Megargel Drlg	6	dsl	300	Beth S45B	275	6
Wes-Mor Drlg	11	dsl		Wils Roadair		6
TITUS						
Cape Drlg	2	dsl	1000	S/B TR7W	800	8.5
Gibson Drlg	4	dsl	506	Wils Mogul 65	298	5
Nowotny & Conley Drlg	2	dsl	2000	OIME SL-1000	1200	15
TOM GREEN						
Bandera Drlg	6	dsl	800	MC U34	380	6.5
Mellon Drlg	1	dsl	750	Emsco GB250	570	7.8
TYLER						
Cliffs Drlg	33	dsl	2000	Nat 80B	1650	14.5
Goldrus Drlg	5	d-e	3400	Oiwl E2000	1700	20
UPSHUR						
Atco Drlg Southern	55	d-e	2000	Nat 80UE	1000	15
UPTON						
Ard Drlg	1	dsl	900	S-H	670	8.5
Cactus Drlg	58	dsl	550	Beth S45E	454	6
FWA Drlg	3	dsl	1250	Wils Super Giant	1040	13
Sharp Drlg	38	dsl	790	Beth M58	988	12
Transcontinental Drlg-San Angelo	96	dsl	1000	MC U36A	830	12
Tri-Service Drlg	6	dsl	1800	Oiwl 96	1830	16
TMBR Drlg	27	dsl	1750	G-D 700	800	14
VAL VERDE						
Santa Fe Drlg	SFW-12	d-e	2300	Emsco A1100E	1800	20
Tri-Service Drlg	11	d-e	3000	MC 1220ED	3000	20
VAN ZANDT						
Delta Drlg	21	dsl	2300	G-D 1100	2582	17
Maxwell Herring Drlg	17	dsl	2400	Beth 1500	2400	20
Noble Drlg	N-85	dsl	1830	Nat 80B	1830	15
VICTORIA						
B D K Drlg	1	dsl	1000	Wils Giant	960	8.5
	6	dsl	1000	S/B 4610	950	10
	8	dsl	1000	S/B 4610	750	10
Corpus Christi Drlg	5	dsl	300	Wils Super 38	250	6
	8	dsl	300	S/B 550	450	6
FWA Drlg	16	dsl	1350	Wils Mogul 42	730	9
	29	dsl	2600	Nat 110	2400	20
Houtech Drlg	803	dsl	1600	G-D 700	1200	15
	804	dsl	1600	G-D 700	1200	15
Kelley Onshore Drlg	3	d-e	2000	OIME SD7	1500	18
	10	d-e	1700	Oiwl 750	750	12
VICTORIA (Cont'd)						
M N D Drlg-Southern	5	dsl	1536	S/B N95	1536	18
Padre Drlg	2	dsl	500	S/B H4210	400	7.5
Southland Drlg	1	dsl	1100	Emsco GB500		10
	5	dsl	1400	S/B N55		10
	8	dsl	1400	Emsco GB260		8.5
	10	dsl	1850	Beth M610		16
	11	dsl	3000	Emsco A1500		24
	12	dsl	3000	Emsco 1500A		19
	14	dsl	3000	Emsco A1500		18
	16	dsl	3000	S/B N12A		18
WALLER						
Bawden Int'l	3	d-s	2100	Nat 110E	1000	18
	4	d-s	2000	Nat 80UE	1000	14
	5	mch	2000	Nat 110M	1000	18
	15	d-s	1000	Nat 610E	750	12
	26	mch	1550	Oiwl 76	700	13
	30	d-m	1850	Emsco D3 Type III	1000	15
Murco Drlg	30	dsl	2800	Oiwl N200B	3000	25
WARD						
Aztec Well Serv	184	dsl	600	Wils M75	1100	12
Cactus Drlg	62	dsl	580	Idco H36	454	6
Delta Drlg	86	dsl	500	S-H 7000	480	9
	98	dsl	1500	Wils Giant Roadair	784	12.5
Kenai Drlg	31	dsl	690	MAC 300	400	7
Loffland Bros	117	d-e	3300	MC U1220EBD	3300	25
Parker Drlg	58	dsl	1850	Nat 100M	1800	16
Resource Drlg	RO3	dsl	3105	Nat 1320	3740	25
Rod Ric	8	dsl	670	S/B N45	600	8
	9	dsl	750	Idco H35	600	8
Sharp Drlg	61	dsl	2331	MC U914C	2742	23.5
TMBR Drlg	5	dsl	700	Nat 50CA	800	10.5
WASHINGTON						
Haning & Young Drlg	101	d-m	1600	Nat 610	750	12.5
	102	d-m	2800	OIME SL7	1000	12.5
Resource Drlg	RO-31	dsl	1560	Nat 80B	1835	14
Spartan Drlg	9	d-e	1000	Sup 1000E	1000	18
WEBB						
Atco Drlg Southern	11	dsl	1600	Nat 55	550	12
Cliffs Drlg	40	d-e	2800	Nat 1320UE	3025	25
Corpus Christi Drlg	4	dsl	300	Wils Super 38	250	5.4
Dixon Drlg	12	dsl	900	S/B N4	450	6
Harkins & Co	6	dsl	1260	S/B N75A	1280	12.5
	8	dsl	1800	Emsco C1 Type III	1800	18/ 5"
Moran Bros	67	dsl	1700	Emsco D3	1000	15
Nicor Drlg	58	d-e	2700	MC U1220EB	2000	25
Penrod Drlg	16	dsl	3075	S/B N12A	1840	20
	25	dsl	2800	Emsco C2	1950	25
	126	dsl	1000	Nat 80B	1780	15
	132	dsl	1000	Nat 80B	1780	
	136	dsl	1000	Nat 80 B	1000	15
Rio Grande Drlg	7	dsl	750	OIME SL5	1500	12
Texas Drlg	2	dsl	1700	S/B N7	1200	11
	3	dsl	1700	Nat 50A	1200	11
	6	dsl	1700	Cbot 900	900	10
	8	dsl	2000	Cbot 2550	1200	14
	9	dsl	1800	Emsco D2	1200	14
	10	dsl	2000	Cbot 2550	1000	14
Williams Drlg of South TX	2	dsl	1000	Cbot 900	900	10.5/ 4"
	4	dsl	900	Idco BIR6065	930	11.5/ 4"
Willis Drlg	6	dsl	1000	Idco H1700	2400	20
WHARTON						
Big 6 Drlg	7	dsl	800	Idco	680	10
FWA Drlg	24	dsl	1350	Wils Mogul 42	720	11
Louise Drlg	1	dsl		Idco H40		12.5
Padre Drlg	7	dsl	780	S/B H14610	750	10
	16	dsl	1300	S/B 4610	450	8.5
WHEELER						
Baker & Taylor Drlg	3	dsl	1200	MC U20	1200	18
Helmerich & Payne	47	dsl	2475	Oiwl M2000	2730	28
Loffland Bros	222	d-e	3300	MC U1220B	2200	28
Noble Drlg	OW-22	e-s	3300	Oiwl E2000	3300	25
ONEOK Drlg	10	dsl	3000	Nat 110M	1500	20
WHEELER (Cont'd)						
Parker Drlg	162	dsl	2200	OIME SL1500P	2200	22
Quarles Drlg	10	dsl	2700	MC U914C	2400	22
Sharp Drlg	68	d-e	2331	Oiwl M2000E	2742	30
Viersen & Cochran Drlg	16	d-e	2400	Nat 1320	3300	23
WICHITA						
Moran Drlg, E W	11	dsl	2800	Wils 150A	1650	20
	22	d-e	3200	Emsco C3	3000	30
	25	d-e	3200	G-D 3000E	3000	25
	28	d-e	3200	G-D 3000E	3000	40
	30	d-e	3200	G-D 3000	3000	30
WILBARGER						
Bearden Drlg	2	dsl	1500	Wils 75	900	9
WILLACY						
Alamco Drlg	2	dsl	1000	Idco H40	800	10
Delta Drlg	89	d-s	2000	Emsco D3 Type II	2582	16
Nicklos Drlg	76	d-e	2800	Nat 1320UE	1800	25
WILSON						
South Texas Drlg	8	dsl	800	S/B N46	550	8
WINKLER						
Cactus Drlg	22	dsl	1450	Nat100	1000	10
	60	dsl	550	Beth S45E	454	6
Penrod Drlg	111	dsl	1950	Nat 1625M	3000	30
Sharp Drlg	55	dsl	2321	G-D 2100	2742	30
WISE						
M N D Drlg-Northern	51	dsl	780	Nat 50	700	7
	52	dsl	780	Nat 50	700	7
	53	dsl	1040	MC U15	780	8
	54	dsl	1040	MC U15	780	8
	55	dsl	1040	MC U15	780	9
	59	dsl	1040	Emsco G500	780	9
	60	dsl	1040	MC U15	780	10
	61	dsl	1400	MC U36A	780	11
	62	dsl	1040	MC U15	780	10
	63	dsl	1040	MC U15	780	10
	64	dsl	1040	MC U15	780	10
	65	dsl	1400	MC U36A	780	12
	66	dsl	1400	MC U36A	780	12
Wes-Mor Drlg	10	dsl		MC U15		7.5
WOOD						
Gibson Drlg	6	dsl	506	Wils Mogul 42	318	5
	8	dsl	529	Wils 65	380	5
Goldrus Drlg	3	d-e	1700	Oiwl E2000	3400	20
Helmerich & Payne	40	dsl	1650	Oiwl 860	1815	20
	79	d-s	2200	Nat 110UE	1500	20
Justiss Oil	28	dsl	700	Oiwl 96	1000	16
	33	dsl	1000	Oiwl 96	1400	17
WOODWARD						
Unit Drlg & Expl	3	dsl	700	Nat 50A	800	11
YOAKUM						
Cactus Drlg	19	dsl	1050	Nat 50A	850	1
	61	dsl	550	Nat T20	480	6
Dual Drlg	26	dsl	2550	Wils 150A	1650	18
Grace/T R G	383	dsl	1000	Wils 75	900	12
Grace/T R G Drlg	3	d-m	1345	G-D 700M	1100	13
Hondo Drlg	10	dsl	1200	S/B N75A	1200	15
Norton Drlg	7	dsl	450	Wils 65	650	8.5
Rod Ric	2	dsl	450	Beth S45E	400	7.5
Sharp Drlg	52	dsl	1560	Beth M610	1836	19
	65	dsl	1580	Emsco D3	1836	18
Sitton Drlg	4	dsl	650	Wils 75P	900	10
TMBR Drlg	2	dsl	350	Weis W45	450	7
	17	dsl	350	MC U15CA	500	9
	33	dsl	700	Weis W45	600	9
Verna Corp	2	dsl	690	S/B N65	800	12.5
YOUNG						
Burns Drlg	8	dsl	444	MC U34B	250	7.5
E & H Drlg	4	g-e	550	MC U15	500	7.5
Franklin Drlg	1	dsl	380	G-D 1500	380	1.5
	2	dsl	400	G-D	400	2.5
Grand Drlg	1	dsl	800	Skef S3800S	475	8
ZAPATA						
Buzzini Drlg	10	dsl	1400	Oiwl M2000	2800	20
Delta Drlg	94	d-s	2800	Emsco D3 Type II	2582	16

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ONSHORE DRILLING CO.

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TEXAS (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
ZAPATA (Cont'd)						
Dodlyn-Field Drlg	14	d-e	2200	Olwl 840E	2000	18
Loffland Bros	88	d-e	2180	MC U712	2400	18
Penrod Drlg	22	dsl	2800	Nat 1320M	1950	25
	119	dsl	1800	Nat 1625M	3000	30
	128	dsl	1800	Nat 80B	1700	15
	135	dsl	2800	Nat 80B	1800	15
PRC Drlg	5	dsl	1617	G-D 700M	1040	14
	7	dsl	2465	G-D 800M	1040	15
Texas Drlg	5	dsl	2880	Cbot 2500	1250	14
	7	dsl	1700	Cbot 900	900	10

UTAH

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Noble Drlg	OW-862	dsl	2400	Olwl 860	2400	18
TWT Expl	51	dsl				5.5
	55	dsl				8
	56	dsl				12
	57	dsl				17
	58	dsl				14
	59	dsl				12
W E S Corp	7		1000	Wils Giant	1000	12
	51	dsl				5
	58	dsl				14
	59	dsl				12
Westburne Drlg	66	dsl	1000	G-D 1100E	1000	20
CARBON						
Kenting Drlg	20-E	d-e	2400	MC U914 EC	2000	20
Nicor Drlg	46	d-e	2000	Emsco C1E	1500	21
Viersen & Cochran Drlg	7	dsl	2000	Unit U712	1400	16
DAGGETT						
Parker Drlg	180	dsl	3200	OIME 2000E	3000	30
DUCHESNE						
Apollo Drlg Inc (CO)	4	dsl	1500	Nat 80B	1000	16
Grace-Bomac Drlg	91	dsl	1500	Nat 80B	1500	16
Manning, R L	10	dsl	720	Olwl 660	720	10
Montgomery Drlg	31	dsl	2000	Nat 110UE	2700	18
	32	d-e	2700	Nat 110UE	2000	18
	43	d-e	2000	Nat 110UE	2000	20
	44	dsl	2000	Olwl 96	1000	20
	48	dsl	2000	Nat 110	2000	20
Nicor Drlg	60	dsl	1350	Nat 55M	700	15
	86	dsl	2000	MC U712A	1200	18
Parker Drlg	117	gas	2000	Nat 110	2000	22
Westburne Drlg	56	dsl	310	Nat T32	275	7
EMERY						
Apollo Drlg Inc (CO)	2	dsl	1300	Nat 80B	1000	16
Four Corners Drlg	3	dsl	1300	Crdw KB600	700	8
Loffland Bros	1	dsl	1290	MC U40	1440	10
Rio Grande Drlg	27	dsl	750	S/B N75	1000	14.5
Veco Drlg	3	dsl	650	MC U36A	700	9
GARFIELD						
Loffland Bros	58	d-e	1600	Nat 80B	2000	15
GRAND						
Anderson-Myers Drlg	7	dsl	1200	Nat 55	1400	10
Veco Drlg	9	dsl	1200	Idco 725	750	11
IRON						
Grace-Bomac Drlg	60	d-e	3645	Nat 1320UE	2800	25
RICH						
Atco Drlg	9	d-e	2500	Nat 110UE	2500	20
Grace-Bomac Drlg	44	dsl	1500	G-D 800	1500	16
Loffland Bros	108	dsl	2180	S/B N10A	2400	25
SAN JUAN						
Arapahoe Drlg	2	g-b	380	Nat T32	320	8
	4	g-b	700	Nat 50A	300	12
Bayless Drlg	1	dsl	1000	Idco H1000	800	10
Coleman Drlg	2	dsl	555	Idco H400	700	8
	4	dsl	800	S/B M600H45	900	12
Energy Search Drlg	1	dsl	1000	Cbot 900	900	10
	2	dsl	1000	Cbot 900	900	10
Forwest	6	d-e	2800	Nat 110UE	2000	20
Parker Drlg	116	d-e	1650	Nat 80B	1650	20
SAN PETE						
Dodlyn-Field Drlg	39	d-e	2730	Nat 110UE	2000	18
SEVIER						
Grace-Bomac Drlg	56	dsl	2250	G-D 1100M	2250	20
SUMMIT						
Brinkerhoff-Signal	88	dsl	4000	Nat 110UE	2000	20
Dodlyn-Field Drlg	33	d-e	1860	Olwl 840E	2000	20
Grace-Bomac Drlg	98	d-e	2730	Nat 110UE	2730	20
Loffland Bros	8	dsl	2180	MC U914C	2400	20
	106	dsl	2180	MC U914C	2400	20
Lord Drlg	3	dsl	2200	Olwl M660	1850	18

UTAH (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
SUMMIT (Cont'd)						
Manning, R L	31	d-e	1350	Emsco D2	700	11
	33	d-e	1850	Emsco C1	1500	20/ 5"
Norton Drlg	9	d-e	1350	G-D 110E	1500	20
Parker Drlg	171	dsl	1650	OIME 1500P	1650	20
	183	dsl	1650	OIME 1500P	1650	20
Viersen & Cochran Drlg	11	dsl	2600	Nat 110	2400	20
UINTAH						
All Western Drlg	2	gas	800	MC U15	700	10
	3	dsl	1050	MC U15	840	10
Anderson-Myers Drlg	14	dsl	1800	S/B N75A	1800	14
Bowden Drlg Ltd	21E	d-e	2000	Emsco C1		20
Brinkerhoff-Signal	79	dsl	550	Nat 370	800	8.5
	85	dsl	550	Nat 370	800	9
Manning, R L	23	dsl	800	S/B N45	740	7.5
Nicor Drlg	43	d-e	1500	G-D 500E	650	11
Olsen Drlg	2	dsl	1250	Scst 7502S	824	10
	5	dsl	6015	Crdw L350	500	7.5
Parker Drlg	177	dsl	1650	OIME SL1500	1650	16.5
Veco Drlg	2	dsl	425	May 5000	500	7
Viersen & Cochran Drlg	13	dsl	2000	Nat 80B	1600	17
UTAH						
Loffland Bros	221	dsl	2880	MC U1220AE	3200	25
WAYNE						
Loffland Bros	5	dsl	1220	Idco H1000	868	12

VERMONT

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
FRANKLIN						
Delta Drlg	84	dsl	1800	Emsco D3 Type III	1560	16

VIRGINIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Ray Resources	7	dsl	450	Crdw KB500	700	8
WISE						
Ray Resources	4	dsl	450	Idco BIR5525	600	6
	9	dsl	450	Idco H35	600	6.5
Union Drlg	2	dsl	1200	Idco BIR5525	425	6

WASHINGTON

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
BENTON						
Brinkerhoff-Signal	32	dsl	1000	Emsco GC350	465	8
	70	dsl	550	Crdw KW250	450	6.5
GRANT						
Brinkerhoff-Signal	53	d-e	2325	Nat 110	2325	20
GRAYS HARBOUR						
Bowden Drlg Ltd	14E	scr	1300	Nat 1320UE	2000	220

WEST VIRGINIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Ray Resources	3	dsl	450	Idco BIR5525	600	6
	8	dsl	450	S/B N55	800	10
BOONE						
FWA Drlg	23	dsl	275	Wils Super 38	300	6
Hurt & Assoc, Clint	5	dsl	350	Wils Super 38	350	5
CABELL						
FWA Drlg	13	dsl	275	Wils Giant	300	4.5
CALHOUN						
Hurt & Assoc, Clint	7	dsl	350	Kremco K600	500	7.5
CLAY						
Smith Drlg	10	dsl	300	Chal M320	425	5
GILMER						
Union Drlg	11	dsl	1200	S-H 5000	350	5
HARRISON						
Union Drlg	1	dsl	1200	Crdw KM250	425	6
JACKSON						
Hurt & Assoc, Clint	2	dsl	350	Wils Super 38	350	5
	4	dsl	350	Wils Super 38	350	5
	6	dsl	350	Wils Mogul 42	500	7
Smith Petr, Carl E	4	dsl	350	Emsco GB250T	500	10
	5	dsl	238	Wich	320	4.2
KANAWHA						
FWA Drlg	22	dsl	275	Wils Super 38	300	4.5
LEWIS						
Union Drlg	15	dsl	1200	Idco BIR5525	425	6
MINGO						
FWA Drlg	15	dsl	275	Wils Super 38	300	4.5
PUTNAM						
Smith Drlg	12	dsl	500	Chal M320	425	5

WEST VIRGINIA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
RITCHIE						
Hurt & Assoc, Clint	1	dsl	350	Wils Mogul 42	500	7.5
ROANE						
Hurt & Assoc, Clint	8	dsl	350	Kremco K600	500	7.5
TYLER						
Ray Resources	14	dsl		Nat T20	600	6.5
UPSHUR						
Union Drlg	5	dsl	1200	Crdw 350	385	6
	6	dsl	1200	S/B DH4210	425	8
WIRT						
Hurt & Assoc, Clint	3	dsl	350	Wils Super 38	350	5
Smith Petr, Carl E	6	dsl	320	Idco BIR5525	475	8.5

WYOMING

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Pruet-Ram-Co	4	dsl	2000	Emsco D3	2000	18
Westburne Drlg	67	dsl	1725	Olwl 96	1725	20
	68	dsl	1950	MC U1220D	1950	20
	71	dsl	1560	Olwl 860	1560	18
ALBANY						
Burris Drlg	108	dsl	1200	G-D 500	650	110
BIG HORN						
Barnhart Drlg	2	dsl	600	Nat T20	350	5
	3	dsl	600	Idco H35	350	6
Burris Drlg	105	dsl	1200	Unit 36A	650	120
CAMPBELL						
Anderson-Myers Drlg	9	dsl	1200	Nat 55	1200	12
Apollo Drlg Inc (CO)	1	dsl	1000	Nat 55	750	120
	6	dsl	1200	Olwl 76	750	12
	8	dsl	1200	Olwl 76	750	12
	23	dsl	750	Nat 50A	550	95
Brinkerhoff-Signal	2	dsl	875	MC U36A	600	9
	12	dsl	1000	Nat 55	1000	12
	14	dsl	1000	Nat 55	1000	12.5
	20	dsl	500	Nat 50A	500	10
	82	dsl	1500	G-D 700M	800	12.5
Burris Drlg	116	dsl	1200	Sup 700	650	100
Cyclone Drlg	2	dsl	800	Beth M58	800	12
	3	dsl	1250	MC U30	1250	15
	4	dsl	800	MC U15	800	9
	5	dsl	800	Beth M58	800	12
	6	dsl	800	Nat 50A	800	10
Enopco	3	dsl	2000	Nat 80B	1800	17.5
Exeter Drlg Northern	7	dsl	700	S/B N75	1000	12.5
	8	dsl	500	S/B N7	750	9.5
	9	dsl	750	S/B N75	1100	12.5
	10	dsl	500	S/B N55	750	10.5
	18	dsl	500	Nat 50A	750	9.5
	20	dsl	500	Emsco GC500	750	11
	21	dsl	550	MC U15	720	9.5
	30	dsl	750	Emsco D2	1100	12.5
	34	dsl	500	MC U15	750	9.5
	36	dsl	450	Beth M58	750	11
	37	dsl	500	G-D 700	1100	12.5
	38	dsl	500	MC U15	750	9.5
	39	dsl	500	MC U15	750	9.5
Forwest	7	d-e	1300	Idco H100	1000	10
Gallagher Drlg	6	dsl	520	Crdw O	970	12
Grace-Bomac Drlg	28	dsl	1010	Emsco GA500	750	10
	43	dsl	1000	G-D 700M	1000	12.5
	45	dsl	1500	G-D 800M	1500	16
	53	dsl	1500	Nat 80B	1500	16
Harpel Drlg	3	dsl	1200	Idco H725	800	11
	4	dsl	1200	S/B N46	800	12

NICOR Drilling Company
(918) 587-5507

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Nicor Drlg	57	dsl	1060	Nat T45	550	10.6
	59	dsl	1400	Nat 55M	700	14.5
	61	dsl	1550	Nat 610	750	12
	62	dsl	1000	Nat 610	750	12.5
Shelby Drlg	51-E	d-e	1000	Idco 725ESCR	75	110
Tower Drlg	5	dsl	600	G-D 500M	800	11.5
True Drlg	15	g-lp	1300	Nat 50A	1000	11.5
	17	dsl	1350	Nat 50A	1000	12
CARBON						
Anderson-Myers Drlg	1	dsl	680	Nat T32	450	7
	18	dsl	600	Nat T45	800	10
Atco Drlg	54	d-e	1800	Nat 610UE	1800	12
Exeter Drlg Northern	28	dsl	1200	G-D 800	1275	15
Manning, R L	20	dsl	1050	Emsco J1000	1290	14
	24	dsl	860	S/B N75	980	11
Simmons Drlg	48	dsl	350	Hycalog HH6000	350	6.8
CONGRESS						
Westburne Drlg	60	dsl	750	Nat 50A	850	11

WYOMING (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CONVERSE						
Anderson-Myers Drlg	5	dsl	1000	Emsco GB500	820	10
	6	dsl	1800	Emsco GB800	1800	15
Apollo Drlg Inc (CO)	3	dsl	1000	Nat 55	750	12
	24	el	2000	Emsco D3	1000	16
Apollo Drlg Inc (TX)	2	dsl	1500	Nat 80B	1500	16
Brinkerhoff-Signal	5	dsl	1500	Nat 80	1500	15
	76	dsl	800	G-D M500	800	10
Burris Drlg	112	dsl	1500	G-D 1100	1500	20
Helmerich & Payne	38	dsl	1230	Nat 80	1365	16
Loffland Bros	163	dsl	1260	Nat 80B	1500	16
	234	dsl	1400	MC U40	1600	13
Manning, R L	6	dsl	1290	Emsco GB800	1290	14
True Drlg	18	dsl	350	Emsco GB250T	350	6.5
Westburne Drlg	65	dsl	520	Nat T45	460	8.5
CROOK						
Burris Drlg	117	dsl	800	MAC 400	500	10.5
	119	dsl	450	MAC 400	500	10.5
Cyclone Drlg	1	dsl	800	MC U15	800	9
Exeter Drlg Northern	3	dsl	550	Nat 50A	750	9.5
	17	dsl	500	Nat 50A	750	9.5
	35	dsl	500	MC U15	750	9.5
FREMONT						
Atco Drlg	2	dsl	2000	Nat 80B	1800	16
	12	dsl	1800	Nat 80B	1800	16
Barnhart Drlg	4	dsl	350	G-D 15W	350	1.5
Dixilyn-Field Drlg	34	d-e	3720	Nat 1320UE	2000	25
Forwest	2	d-s	2600	Idco E2100	1800	22
Grace-Bomac Drlg	24	dsl	2250	Nat 110M	2250	20
Loffland Bros	223	dsl	1260	MC U15	1000	10
Manning, R L	25	dsl	1000	S/B N75	1300	11.5
Nicor Drlg	70	d-e	2700	G-D 1500E	2000	25
Quarles Drlg	24	dsl	2700	G-D 1500E	2000	30
	25	d-e	4000	Emsco C3	3000	30
Trigg Drlg	6	d-e	2400	MC U914E	2400	25
True Drlg	14	dsl	1200	Nat 50A	1200	12
Westburne Drlg	69	dsl	1400	Nat 1320M	1600	18
HOT SPRINGS						
Manning, R L	28	g-b	800	Emsco GB350	506	7.5
Phelps Drlg Intl	22	dsl	1000	Nat 370	550	9.5
Simmons Drlg	36	dsl	350	Hycalog HH600P	350	6.8
JOHNSON						
Burris Drlg	114	dsl	1500	G-D 1100	1500	20
Grace-Bomac Drlg	59	dsl	1500	Nat 80B	1500	16
Manning, R L	34	d-e	1600	Emsco D3	1000	18
LARAMIE						
Atco Drlg	56	d-e	1800	Nat 80UE	1800	16
Rio Grande Drlg	26	dsl	750	S/B N75	1030	14.5
True Drlg	19	dsl	1000	Nat 50A	1000	12
LINCOLN						
Brinkerhoff-Signal	7	dsl	1500	Nat 80B	1500	15
	72	dsl	2000	Nat 1320UE	2000	25
	73	dsl	1500	Nat 80B	1500	15
Burris Drlg	111	dsl	1500	G-D 1100	1500	20
Exeter Drlg Northern	24	dsl	1000	G-D 800	1100	15
LINCOLN (Cont'd)						
	31	dsl	1000	G-D 800	1650	15
Loffland Bros	60	d-e	1800	MC U712A	2000	17
	89	d-e	2100	MC U1220EB	2400	25
	97	d-e	3300	MC U1220EB	3300	30
	119	d-e	4000	Emsco CE3000 Type II	3300	35
	184	dsl	2160	MC U712A	2400	15
	325	dsl	2160	G-D 2100	2400	25
Manning, R L	30	d-e	1600	Emsco D3	1000	18
Parker Drlg	92	dsl	1650	Nat 100M	1650	16
Rio Grande Drlg	3	dsl	1300	Nat 1320M	2300	25
True Drlg	24	dsl	1400	MC U914C	2400	22
NATRONA						
Atco Drlg	8	dsl	1230	Emsco A550	1230	12
	20	dsl	800	Emsco GB500	800	10
	27	dsl	730	Beth C50	730	9
Burris Drlg	106	dsl	1200	G-D 500	650	110
Challenger Drlg	25	dsl	300	Nat T20	600	5
	27	dsl	300	Nat T12	500	4.5
Dixilyn-Field Drlg	31	d-e	5580	Nat 1320UE	2000	25
	32	dsl	2300	Nat 130	2331	25
Elenburg Expl	3	dsl	320	W-N CC2000	230	2.5
	11	dsl	430	Elenburg 6000	430	6
Exeter Drlg Northern	41	dsl	1000	G-D 700	1100	12.5
Loffland Bros	40	dsl	1680	S/B N95	2000	16
Manning, R L	12	dsl	700	Olwl 66	550	11
Parker Drlg	118	dsl	1650	Nat 100M	1650	20
	124	dsl	1650	Olwl 2000E	1650	25
Shelby Drlg	11	dsl		Idco 35ESCR		10
NIOBRARA						
Brinkerhoff-Signal	21	dsl	1040	Emsco GC500	1040	11.5
Harpel Drlg	5	dsl	1000	S/B N42	65	9
PARK						
Anderson-Myers Drlg	10	dsl	670	Nat T32	800	8.5
Atco Drlg	25	dsl	730	Idco H525	730	9.5
Barnhart Drlg	1	dsl	700	Idco H525	575	8.5
Manning, R L	8	dsl	850	Emsco GA500	850	9
	9	dsl	650	Emsco GA500	650	8.5
	16	g-b	640	Nat T32	458	6.5
	26	g-b	1155	Emsco GB800	1365	14
Molen Drlg	6	d-e	3000	Emsco C1 Type II	2000	22
Penrod Drlg	115	dsl	1600	Nat 1625ME	3000	30
Simmons Drlg	46	dsl	350	Troy M600	350	7.5
Wyoming Well Serv	21	dsl	500	Idco H35	318	5
	24	dsl	300	Crdw 200A	318	4.5
	30	dsl	300	Crdw 200A	318	4.5
SUBLETTE						
Dixilyn-Field Drlg	36	dsl	2000	Nat 110UEV	2000	18
	41	d-e	3720	Nat 1320UE	2000	25
Helmerich & Payne	81	d-s	2200	Nat 110UE	1500	20
Manning, R L	29	dsl	800	Emsco GB500	934	9
Montgomery Drlg	5	d-e	2700	Nat 1320UE	3645	25
Rio Grande Drlg	6	d-e	1350	G-D 1500E	1195	25
	10	d-e	1300	Nat 1320UE	1195	25
True Drlg	9	dsl	1200	MC U40	1200	15
	16	g-lp	1300	Nat 50A	1000	11
	25	dsl	2100	MC U914C	2100	22
SUBLETTE (Cont'd)						
Viersen & Cochran Drlg	9	dsl	2600	Nat 110	2400	20
SWEETWATER						
Apollo Drlg Inc (CO)	16	dsl	1200	Nat 80B	1000	14
Brinkerhoff-Signal	57	dsl	1560	Nat N80B	1560	16
	69	dsl	1000	Nat 110	1500	18
Dixilyn-Field Drlg	40	d-e	1860	Nat 80UE	1000	15
Exeter Drlg Northern	11	dsl	700	G-D 700	1000	12.5
Manning, R L	7	g-b	750	Emsco G500	750	8.5
	22	dsl	1180	Emsco A550	1180	11
Norton Drlg	10	dsl	750	G-D 700	1070	15
Parker Drlg	163	dsl	1650	OIME SL1500	1650	20
Penrod Drlg	23	dsl	2600	Nat	1950	25
Rio Grande Drlg	28	dsl	1000	S/B N95	2300	18
Sabre Drlg	2	dsl	671	Wils Mogul 42	671	5
Shelby Drlg	12	d-e	1600	G-D 1100ESCR	2000	20
TETON						
Loffland Bros	30	d-e	2160	MC 914EC	2200	20
UINTA						
Anderson-Myers Drlg	12	dsl	1500	OIME 1500	1500	17
Brinkerhoff-Signal	6	dsl	1500	G-D 1100	1500	18
	26	dsl	1170	Nat 55	1170	10.5
	40	dsl	2400	Nat 130UE	3000	25
	86	dsl	1000	Nat 80B	1500	16
Dixilyn-Field Drlg	38	d-e	3720	Nat 110UE	2000	18
Exeter Drlg Northern	29	dsl	1200	G-D 800	1125	15
	43	dsl	2250	Emsco C Type III	2250	20
	56	dsl		G-D 1100	1650	20
Forwest	1	d-s	2600	Idco E2100	1800	22
Grace-Bomac Drlg	29	dsl	2250	Nat 110M	2250	20
Loffland Bros	214	dsl	1860	MC U40	1600	13
Lord Drlg	1	dsl	2200	Olwl M860	1350	18
	2	dsl	2200	Olwl M860	1650	18
Manning, R L	14	dsl	1700	Nat 110	1500	20/ 5"
	21	dsl	1095	Nat 80B	1365	15
	32	d-e	1600	Emsco D3	1000	18
	35	d-e	2400	Emsco C1	1500	20/ 5"
Noble Drlg	N-116	e-s	3000	Nat 110UE	3000	20
	132	d-s	3300	Nat 1320UE	3300	25
Norton Drlg	6	dsl	750	Wils 75	900	13
Parker Drlg	112	dsl	3000	Idco E3000	3000	30
	173	dsl	1650	OIME 1500P	1650	20
Rio Grande Drlg	5	dsl	1300	Nat 110	2400	20
Viersen & Cochran Drlg	8	dsl	2000	Nat 80B	1500	16
	14	dsl	2600	Emsco 800A	1500	17.5
WASHAKIE						
Anderson-Myers	2	dsl	1200	Nat 55	1200	12
	15	dsl	1800	S/B N75A	1800	14
Exeter Drlg Northern	19	dsl	700	G-D 800	1100	14
Manning, R L	17	g-b	770	Emsco GC500	910	11
WESTON						
L & R Drlg	4	dsl	400	Cbot Rocket	19[illegible]	3
	6	dsl	318	Cbot 50	31[illegible]	1.5/ 3.5"

International Contract Rotary Land Drilling Rigs

AFRICA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ALGERIA						
SAIPEM	5894	d-e	3200	Nat 110UE	1600	17
	5895	d-e	3200	Nat 110UE	1600	17
EGYPT						
Challenger Ltd	18	dsl	900	Cbot 100	1000	12
Egyptian Drlg	1					
	2					
	4			Nat 110		
	7					
Forex Neptune and/or Affil	7	dsl	3200	Nat 110	1600	19
	33	d-e	3200	G-D 1100	1500	18
Geoprosco Intl	41	dsl	2200	Idco H900	1100	10
Santa Fe Drlg	64	dsl	1800	Nat 110	1800	16
EGYPT (Cont'd)						
Santa Fe Drlg	69	d-e	2000	Nat 1320DE	3400	20
	73	dsl	2000	Nat 110	1800	16
	75	dsl	2000	Nat 1320M	1800	20
	92	d-e	2800	Nat 1320UE	1400	20
	94	d-e	2250	Nat 110UE	2000	16
	97	d-e	2800	Olwl E2000	2000	20
	102	d-e	2400	Nat 110UE	1500	16
	143					
SAIPEM	5863	d-e	3200	Nat 110UE	1500	17
GABON						
Forasol	H-525	d-s	2000	Idco 525	2400	8
	110-5	el	260	Nat 110	4000	16
Forex Neptune and/or Affil	4	dsl	1300	Idco H525	500	9
GABON (Cont'd)						
Forex Neptune and/or Affil	27	dsl	2600	Idco Super 711	1200	18
LIBYA						
Arab Drlg & Workover	ADWOC 1	d-e	1300	Emsco C111	975	20
	ADWOC 2	d-e	2600	Emsco C111	1500	20
	ADWOC 3	d-e	2600	Emsco C111	1500	20
	ADWOC 4	dsl	425	Wils 42BLC Trailerized	325	6
	ADWOC 5	dsl	425	Wils 42BLC Trailerized	325	6
	37	dsl	1550	Nat 80B	1800	12
	53	dsl	1250	Idco H525	700	9

AFRICA (Cont'd)

LIBYA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Arab Drlg & Workover	118	dsl	1250	Idco H525	700	9
Challenger Ltd	19	dsl	1300	Nat 80B	1950	15
Deutsche Tiefbohr	T-16	dsl	2000	Emsco A600	1000	12
	T-26	dsl	2100	Idco Super 711	1500	16
	T-90	dsl		H-L 6206	400	
	T-91	dsl		H-L 6205	130	
Forex Neptune and/or Affil	13	dsl	2500	Idco Super 711	1200	18
	35	d-e	3200	G-D 1110E	1600	18
	42	dsl	2000	Nat 80UE	1000	15.7
	43	d-e	2000	Nat 80UE	1000	15.7
	44	dsl	3200	Idco Super 711	1600	18
KCA Drlg	83	dsl	2000	MC U36EA	1000	10
	100	dsl	750	Crdw KM250	375	6
	101	dsl	375	Cbot 1058	375	12
	102	dsl	375	Cbot 1058	375	12
	103	dsl	375	Cbot 1058	375	12
Oil Drlg & Expl	7	dsl	2000	Idco Super 711	2000	17
	9	dsl	2000	Idco Super 711	2000	17
Pool-Intairdril	2	dsl	318	Cbot 1287/120	476	5
	3	dsl	318	Cbot 1287/120	476	5
	5	dsl	318	Cbot 1058/120	318	5
	10	dsl	318	Cbot 1058/120	318	5
	22	dsl	400	Idco DIR550	400	6.5
	32	dsl	600	Cbot 750	600	6.5
	33	dsl	600	Cbot 750	600	6.5
	34	dsl	600	Cbot 750	600	7.5
	204	e-s	2000	Idco ED1200	1000	12
	205	el	2000	Idco ED1200	1000	12
	206	e-s	2000	Idco ED1200	1000	12

MADAGASCAR

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Bawden Int'l Ltd	2					

NIGERIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Forex Neptune and/or Affil	1	dsl	2500	Idco Super 711	1200	18
	9	dsl	2850	Nat 110	1600	19
	10	dsl	2600	Nat 110	1600	19
	24	d-e	3200	G-D 2100RE	3000	25.4
	26	dsl	2600	Idco Super 711	1200	18
	49	d-e	3200	G-D 1100E	1500	18
	54	d-e	3200	G-D 1500E	2000	21.7
SAIPEM	5838	dsl	2500	Idco H1700	2000	16.5
	5847	dsl	2130	Idco H1700	1700	16.5
	5850	dsl	1135	Idco H40	432	6
	5860	dsl	2500	Idco H1700	2000	16.5

SOMALIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Parker Drlg	143	dsl	2000	Nat 110	2250	18

SUDAN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Parker Drlg	220	dsl	1600	OIME SL1000	1000	15
	105-HH/2	dsl	1200	OIME HH1250	1275	14
	119-HH/10	dsl	1950	OIME HH1500	1700	18
	195-HH/42	dsl	2000	OIME TBA2000	2000	20

TANZANIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Blocker Drlg	46					
Deutsche Tiefbohr	T-11					

TUNISIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Blocker Drlg	10	dsl	825	Idco Hydrair H37ESC	434	7.5
	16					
	18	dsl	1475	Cbot 2346	950	10
	45					
	47					20
Forasol	110-2	d-s	2600	Nat 110	2400	16
	110-7	el	2600	Nat 110	4000	16
	1320-2	d-s	3200	Nat 1320	3600	20
Forex Neptune and/or Affil	11	d-e	3200	Nat 110UE	1500	19
SAIPEM	5842	dsl	2250	Idco H1700	1700	16.5
	5846	dsl	2250	Idco H1700	1700	16.5
	5893	d-e	3200	Nat 110UE	1600	17

ZAIRE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Von Rautenkranz Hermann	ITAG-102	dsl	1000	Wils Mogul 42		10

ASIA PACIFIC

AUSTRALIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Oil Drlg & Expl	5	dsl	1100	Idco Super 711	1100	13

ASIA PACIFIC (Cont'd)

AUSTRALIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Oil Drlg & Expl	6	dsl	1200	Nat 55	850	10
	8	dsl	350	Idco H35	500	4.5
	12	dsl	1500	Idco H725	750	10
	15	dsl	2000	Idco H1700	2000	17
	18	dsl	500	Idco H725	725	10
Pool-Intairdril	9	dsl	420	Cbot 1058/160	420	5
	216	dsl		Wils Super 38	350	3.4
Richter Drlg Pty	2	dsl	1600	Nat 55	900	10
	4	dsl	600	Nat T32	300	6
	5	dsl		Coop 750		10
	8	dsl	1400	Nat 110M	1100	15
	9	dsl	2000	Nat 80B	1000	12
	11	dsl		Coop 750	375	10
	14	d-e	2000	Nat 80UE	1000	12
	16	dsl	275	S/B RR550	450	6.5
Richter Drlg Pty	97	dsl		Troy 600	455	2.5
Simmons Drlg	SC 1	dsl	350	Hycalog HH6000	350	6.8

BRUNEI

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Deutsche Tiefbohr	T-41	dsl	1800	Wils 780	780	8

INDIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
SAIPEM	5827	d-e	3200	Idco E2100	2000	20

INDONESIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Bawden Drlg Intl	6	dsl	1000	Nat T45	550	7.5
	9	d-s	3200	Nat 1320UE	2000	22
	28	dsl	925	Emsco GB350	350	7.2
	29	d-e	1400	Nat 80E	1000	12
	51	dsl	1200	Sup 700	700	10
Deutsche Tiefbohr	T-31	dsl	1000	Wils 780	910	8
Forex Neptune and/or Affil	45 (Helirig)	d-e	1950	Wils EH120	1100	16.9
Houlder Marine Drlg	1	d-e	1600	Nat 80UE	1000	12
Loffland Bros	56	dsl	900	MC U36A	900	10
	139	dsl	1400	MC U36	900	10
	300	dsl	600	MC U34	500	4
Parker Drlg	106-HH/3	dsl	1600	OIME HH1250B	1275	14
	115-HH/8	dsl	1200	OIME HH1500	1700	18
	125-HH/13	dsl	1200	OIME HH1500	1700	18
	130-HH/18	dsl	1500	OIME TBA2000	1700	20
	148-HH/32	dsl	2000	OIME TBA2000	1700	20
	156-HH/35	dsl	2000	OIME TBA2000	2000	20
	160-HH/37	dsl	2000	OIME TBA2000	2000	20
	188-HH/38	dsl	2400	OIME TBA2400	2400	24
	190-HH/39	dsl	2000	OIME TBA2000	2000	20
PT Mafhabor Indonesia	MBI 1	dsl	600	Nat 610	750	12
PT Meta Epsi Drlg	1	dsl	1600	Nat 610	850	12
	2	d-e	1050	HS1500E	1500	15
	3	d-e	1050	HS1500E	1500	15
	4	d-e	2600	S/B NE95A	1800	20
Richter Drlg Pty	7	dsl	1600	Nat 610	750	10

MALAYSIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Deutsche Tiefbohr	T-10	dsl	2700	Nat 110H	1500	16

NEW GUINEA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Parker Drlg	140-HH/28	dsl	1500	OIME TBA2000	1700	20

NEW ZEALAND

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Oil Drlg & Expl	16	dsl	1600	Idco 1200	1600	14
	17	d-e	2800	Idco E2100	2800	21

PAKISTAN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Challenger Ltd	61E	dsl	2800	G-D 1100E	1500	20
	62E	dsl	2800	G-D 1100E	150	20
Deutsche Tiefbohr	T-35	dsl	1600	Coop LTO750	750	10
	T-37					
Forasol	110-9	d-s	2600	Nat 110	2400	16
Parker Drlg	126-HH/14	dsl	1500	OIME TBA2000	1700	20
Pool-Intairdril	218	dsl		Idco H44	750	8.5

PHILIPPINES

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
PNOC Energy Drlg	1	dsl	1650		1650	12.5
	3	dsl	1100	Idco H725	1100	8.5
	4	dsl	1350	Nat 610	1100	10
	5	dsl	1350	Nat 610	1100	10
	6	dsl	1350	Nat 610	1100	10
	7	dsl	680	Idco H525	684	8
	8	dsl	2000	Emsco D3	2000	12.5

ASIA PACIFIC (Cont'd)

PHILIPPINES (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
PNOC Energy Drlg	9	dsl	1100	Nat 370	730	7
	10	dsl	4000	Idco E2100	2000	21
Richter Drlg Pty	6	dsl	1350	Nat 100	1000	14

THAILAND

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Deutsche Tiefbohr	T-46	d-e	2600	Emsco C2	2000	20
	T-48	d-e	2600	Emsco A600	1000	15
Forasol	80-B2	d-s	2600	Nat 80	2400	120
	110-10	d-s	2600	Nat 110	2400	16
Parker Drlg	194-HH/41	dsl	2000	OIME TBA2000	2000	20
	200-HH/44	dsl	2000	OIME TBA2000	2000	20

CANADA

ALBERTA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Adeco Drlg & Engr	1	dsl	312	Nat T20M	370	5.9
	2	dsl	380	OIME SD3	365	8.5
	3	dsl	308	Nat T32	320	7
	8	dsl	1500	Nat 100M	2340	18
	12	dsl	312	Nat T32	380	8.2
	14	dsl	312	Nat T32	320	7
	15	dsl	365	Nat T45	575	10.5
	16	dsl	308	Nat T32	312	7
	18	dsl	700	OIME Hellhoist 500C	1370	7.5
	19	dsl	308	Nat T32M	320	8.2
	20	dsl	610	Nat 370	475	8.2
Argus Drlg Div Taro Inds	1	dsl	320	Nat T32	327	7.2
	2	dsl	320	Emsco 250T	327	6.5
	4	dsl	320	MC U34	319	6
	5	dsl	1100	Olwl 76	1326	12
	7	dsl	320	Nat T32	327	8.2
Arrowhead Drlg	C-1	dsl	1040	Nat 610	1040	12
	C-10	dsl	1560	Nat 80B	1560	15
	C-11	dsl	1560	Nat 80B	1560	15
	C-2	dsl	770	Nat 370	770	9
	C-4	dsl	1040	Nat 610	1040	12
	C-5	dsl	1560	Nat 80B	1560	15
	C-6	dsl	770	Nat 370	770	9
	C-7	dsl	1040	Nat 610	1040	12
	C-8	dsl	1040	Nat 610	1040	12
	C-9	dsl	1040	Nat 610	1040	12
Atco Drlg Bow Island Div	2	dsl	275	W-N 2000	275	2.9
	6	dsl	275	W-N 2000	275	2.9
	7	dsl	275	W-N 2000	275	2.9
	8	dsl	275	W-N 2000	275	2.9
	9	dsl	275	W-N 2000	275	2.9
	10	dsl	275	W-N 2000	275	2.9
	17	dsl	275	Unit U34	300	5.5
Atco Drlg Mustang Div	31	dsl	815	S/B N45	720	8.5
	34	dsl	300	Nat T20	350	5.5
	35	dsl	820	Nat T45	820	9
	36	dsl	300	Idco H30AD	300	5.5
	39	dsl	300	Nat T20	300	6
	40	dsl	700	S/B N45	650	8.5
	41	dsl	300	Idco H30F	350	6
	42	dsl	650	Idco H35	700	7.5
	45	d-e	1500	Nat 610E	750	12
	50	dsl	300	Idco H30F	350	6
	53	dsl	735	Nat T45	650	9
	54	dsl	715	Idco H35D	650	7.5
	55	dsl	500	Idco H35	365	6.5
Badger Drlg	2	dsl	400	Nat 370	600	7.6
	4	dsl	400	Sup 400	500	7
	6	dsl	400	Nat 370	600	7.6
	99	dsl	500	Sup 300	450	6.2
Bawden Drlg	12	mch	1700	Emsco D3	1000	16
	16	mch	1800	Emsco D3	1000	12
	17	mch	1100	G-D 500	500	9
	20	mch	1000	G-D 500	500	9
	33	mch	1850	Olwl 880	1400	16
Beaver Drlg	1	dsl	300	Nat T32	300	7
	2	dsl	300	Nat T20	300	6
	3	dsl	300	Nat T20	300	6
	4	dsl	300	Nat T32	300	7
	5	dsl	300	Nat T32	300	7.5
	6	dsl	300	Nat 370	550	8.5
	7	dsl	550	Nat 370	550	9.5
	8	dsl	300	Nat T32	300	7
	9	dsl	550	Nat 370	550	9.5
Blocker Drlg	5					
	6	dsl	1000	OIME 1000SL	1500	16
	7	dsl	770	OIME 750SL	1155	14
	9					14
	10					10
Brelco Drlg	1	dsl	800	Olwl 700	900	12
	2	dsl	800	Olwl 700	900	12
	3	dsl	600	Olwl 500	750	9
	4	dsl	600	Olwl 500	750	9
	5	dsl	600	Olwl 500	750	9
	6	dsl	600	Olwl 500	750	9
	7	dsl	800	Olwl 700	900	12

CANADA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ALBERTA (Cont'd)						
Cactus Drlg	1	dsl	750	S/B N55	750	8.5
	2	dsl	940	Nat 55	940	11.5
	3	dsl	350	MC U34	350	6.5
	4	dsl	350	MC U34	350	6.5
	5	dsl	1554	Idco Super 711	1554	15
	6	dsl	900	Crdw AO	900	9.5
	7	dsl	700	Emsco GB350	700	8.5
	8	dsl	350	MC U34	350	6.5
	9	dsl	350	MC U34	350	6.5
	10	dsl		Nat T32	700	7.8
	14	dsl	750	Emsco GB500	750	8
	15	dsl	750	Emsco GC350	750	6.5
	16	dsl	500	MAC 300	500	6.5
	17	dsl	500	MAC 300	500	6.5
	18	dsl	500	MAC 300	500	6.5
	19	dsl	500	MAC 300	500	6.5
	20	dsl	1200	Emsco D2	1200	14
	24	dsl	300	Beth S55	300	6
	25	d-e	3400	Emsco C2	2000	20
	26	d-e	2700	Emsco D3	500	18
	28	dsl	1200	S/B N75	1200	12.5
Can-Tex Drlg & Expl	5	dsl	1200	Emsco GB800	1200	12
	6	dsl	1400	Emsco GB80083	1275	14
	7	dsl	1000	Emsco D2	900	12
	8	dsl	820	Olwl 66	820	9
	10	dsl	800	Nat 370	450	8
Centennial Drlg	1	dsl	360	MC 60005	350	5.5/3.5"
	2	dsl	300	Emsco 250GA	350	5.5/3.5"
	3	dsl	480	Nat T32	750	8.5
Challenger Drlg-Calgary	JB9E	d-s	2400	Nat 80UE	2000	15
	2	dsl	650	Nat T45	608	9
	11	dsl	350	Nat T20	456	5.7
	39	dsl	350	Nat T20	456	5.7
	44	dsl	1300	Nat 80B	1950	15
	50	dsl	2000	Nat 110	2385	19
	51	dsl	1630	Nat 110	1980	19
	55	dsl	1180	Nat 100HD	1470	16.5
	5-E	d-e	1220	Nat 55	1830	12.5
	8-E	d-e	1500	Nat 80E	2250	14.5
	10-E	d-s	2800	MC U1220EB	2800	22/5"
Ensign Drlg	2	dsl	440	Emsco	440	1.9
Guthrie McLaren Drlg	1	dsl	300	Olwl 52T	400	7
	2	dsl	300	S/B N4	300	6.5/3.5"
	3	dsl	680	Nat 50CA	600	10
	4	dsl	375	Sup D500	450	7
	5	dsl	750	Nat 50CA	400	8.5
	6	dsl	300	Fail 2500A	225	3
	8	dsl	300	Fail 2500A	225	3
	9	dsl	1940	OIME 1500	1940	18
	10	dsl	300	Sup D500	450	7
	11	dsl	450	Sup 500	450	7
	12	dsl	325	Sup S400	300	6.2
Hi Tower Drlg	2	dsl	780	Olwl 66	800	9.5
	3					
	7					
	1E	d-e	3800	Nat 1320UE	2000	20
	10	dsl	1150	Olwl 76	1220	10
	11	dsl	350	Sup 400	540	6.5
	19					
	5E	d-e	700	Idco E725	700	9.5
	6E	d-e	700	Idco E725	700	9.5
	18E	d-e	1800	Olwl 760	1000	15
	20E	d-e	1800	Olwl 760	1000	15
Jade Drlg	3	dsl	550	Idco H25	380	7.5
	5	dsl	500	Idco H30	420	7.5
Jomax Drlg	1	dsl	800	Olwl 52T	455	2.6
	2	dsl	800	Olwl 52T	455	2.6
	3	dsl	800	Olwl 52T	455	2.6
	4	dsl	1200	Olwl 76A	1275	4.3
	5	dsl	875	Nat 50A	875	10.5
	6	d-e	2400	Olwl 760	1600	5
	7	d-e	2400	Olwl 760	1600	5
Kenting Drlg	4	dsl	720	610	720	11.5
	5	dsl	350	Sup 400	350	7.5
	9	dsl	720	Nat T32	720	7.5
	10	dsl	720	Olwl 66	720	10
	15	dsl	720	Nat 370	720	9
	18	dsl	800	Nat 50A	800	9.5/5"
	24	dsl	350	Nat 370	350	9
	27	dsl	1040	Nat 610	1040	12
	28	dsl	700	Nat 370	700	9
	29	dsl	1040	Nat 610	1040	12
	37	dsl	350	Sup 400	700	7.5
	38	dsl	800	Nat 370		9.5
	22-E	d-e	2000	Nat 80UE	1000	13
	23-E	d-e	2000	Nat 610E	1000	11.5
	39-E	d-e	1100	Nat 370E	1130	10
KCA Drlg	C1	dsl	1200	Nat 55	612	10
Lemkco Drlg	1	dsl	770	OIME 750 S/L	1155	12
	2	dsl	800	OIME SD3SL	800	10
Loffland Bros	9	d-e	2000	MC U914	1980	20
	36	dsl	2000	MC U914C	2880	20
	72	dsl	1700	MC U914	2880	20
	93	d-e	2100	MC U1220EB	2400	25
	171	d-e	2132	MC U914B	1700	18
	198	dsl	1400	MC U914A	1580	18
Montgomery Drlg	42	d-e	2000	Nat 110UE	2000	20
	49	d-e	2000	Nat 110E	2000	20
Nabors Drlg	4	dsl	2000	Olwl 76	1740	14
	5	dsl	700	Olwl 76	1326	12
	15	dsl	1200	Emsco A550	884	11
	16	dsl	2000	Emsco A800	1740	15
	19-E	d-e	2000	Emsco CI	3900	20
	21-E	d-e	3200	Emsco IIC	3900	20
	23-E	d-e	1600	Emsco D2	1800	14
	24-E	d-e	2000	Emsco Electrohoist 2C	2925	18
Parker Drlg	98	dsl	1500	Nat 100	1000	17
Phelps Drlg Intl	1E	d-e	1200	MC U36EA	800	11
	18	dsl	500	TSM 6000	450	7
	19	dsl	500	TSM 6000	450	7
	20	dsl	500	TSM 6000	450	7
	23	dsl	1000	Nat 370	550	9.5
	24	dsl	1000	Nat 370	550	9.5
	4E	d-e	700	Sup 700E	700	9
	5E	d-e	700	Sup 700E	700	9
Precision Drlg	1	dsl	350	Idco H30FD Super	350	6.5
	4	dsl	350	Idco H30D	350	7.2
	5	dsl	350	Idco H525D	350	7.5
	6	dsl	350	Idco H30	350	6.5
	7	dsl	350	Idco H30D	400	8
	8	dsl	350	Idco H30D	350	6.5
	9	dsl	350	Idco H30D	350	7.5
	10	dsl	350	Idco H35D	350	7.2
	11	dsl	350	Idco H40PD	350	7.2
	12	dsl	500	Idco H30D	350	7.5
	14	dsl	350	Idco H40	500	7.5
	15	dsl	350	Idco H30FD	350	7.5
	16	dsl	700	Emsco PD650	650	10
Red Arrow Drlg	1	dsl	225	Nat T20	275	6
	3	dsl	225	Nat T20	275	6
	4	dsl	225	RAD 200	275	6
	5	dsl	225	Nat T20	275	6
	6	dsl	225	RAD 200	275	6
	7	dsl	225	RAD 200	275	6
	8	dsl	225	RAD 200	275	6
	9	dsl	225	RAD 200	275	6
	10	dsl	225	RAD 200	275	1.8
Regent Drlg	1	dsl	675	Idco H40	330	7.5
	3	dsl	840	S/B N4	900	9.5
	4	dsl	840	S/B N4	900	9.5
	5	dsl	840	S/B N4	820	9.5
	8	dsl	1800	G-D 1100	2100	15
	9	dsl	1400	S/B N45	1400	14
	10	dsl	830	S/B N4	900	9.5
	11	dsl	2200	Olwl 840E	2592	20
	21	dsl	2200	Olwl M2000	2592	20
	22	dsl	830	MC U36A	500	8.5
	23	dsl	800	S/B N4	820	9.5
	24	dsl	800	S/B N4	900	9.5
	25	dsl	1400	S/B N45	1400	14
	28	dsl	1400	S/B N45	1400	14
	29	dsl	350	S/B N4	385	6
	14-E	dsl	2800	Olwl 840E	1800	20
	15-E	dsl	2700	G-D 1500	2000	21
	16-E	dsl	2700	G-D 800E	1000	14
	17-E	dsl	2700	G-D	1000	14
Rocky Mountain Drlg	1	dsl	650	Nat 370	650	8.5
	2	dsl	1150	G-D 500	700	8.5
	3	dsl	1650	Nat 80	1650	15
	4	dsl	1050	Unit U36A	1050	10
S & T Drlg	1	dsl	1100	Nat 55	1100	11
	2	dsl	350	Nat T32	350	7
	3	dsl	1200	Nat 55	1200	11.5
	4	dsl	700	Nat 50CA	400	8
	5	dsl	1150	Nat T45	800	9.5
	6	dsl	1200	Nat 610	1200	11.5
	7	dsl	1200	Nat 610	800	10.5
	9	dsl	800	Nat 370	800	8.5
	10	dsl	350	MC U34	350	6.5
Sedco Drlg	71	dsl	350	Sup 400	456	6
	77	dsl	375	Sup 400	456	6
	79	dsl	318	G-D 3000	318	4
	81	dsl	375	Sup 400	318	6
	83	dsl	350	Crdw 150A	318	4.2
	86	dsl	175	Kremco K6000	450	5
	88	dsl	350	Crdw S350	350	5.5
	89	dsl	350	Idco H30D	318	5
	90	dsl	350	MC U34D	456	5.5
	91	dsl	330	Emsco GB250	456	6.5
	92	dsl	350	Sup 400	456	5
	95	dsl	300	Sup 400	456	6
	96	dsl	300	Idco H25	318	4.5
	97	dsl	300	Nat T32	456	6
	99	dsl	350	Emsco G[illegible]	456	6.5
	93-E	d-e	375	Sup 400	210	6.5
Shelby Drlg	1	dsl	319	Coop 3000D	318	5
	2	dsl	319	Coop 3000D	300	5
	3	dsl	319	Cbot 1287	475	6[illegible]
	5	dsl	630	Coop 550		7.5
	8	dsl	1200	OIME 750SL	1200	14
	10	d-e	700	Sup 400E		8.5
Simmons Drlg	8	dsl	450	Troy 600	700	10
	11	dsl	350	Hycalog HH6000	350	6.8
	12	d-e	1200	G-D 500E	700	9
	19	dsl	575	Troy M600	535	7.5
	23	dsl	175	Troy 300	175	1.8
	25	dsl	350	Mac 300	350	6
Spartan Drlg	2	d-e	700	Sup 700E	700	1
	3	d-e	550	Sup 400E	400	7.5
	20	d-e	600	Olwl 500E	500	9
	21	d-m	700	Shef 6000	600	6.5
	22	d-m	700	Nat 370	600	9
	24	d-m	380	Sup 300	300	5.5
	44			Nat T8		
Tri-City Drlg	1	dsl	250	Fail 2500	200	3
	2	dsl	300	MC U34	3000	6
	3	dsl	250	Fail 2500	200	3
	4	dsl	300	Fail Stratmaster 90	280	5
	5	dsl	250	Fail 2500	210	3
	7	dsl	250	Fail 2500	210	3
	8	dsl	300	Fail 3500	280	3.5
	9	dsl	300	Sup 300	300	4.5
	10	dsl	300	Sup 300	300	4.5
Westburne Drlg Canada	1	dsl	1580	Nat 80B	1580	13
	4	dsl	1040	Emsco GC500	1040	11
	8	dsl	380	Idco H40D	360	7
	10	dsl	1275	Nat 80	1275	13
	12	dsl	720	Nat 370	720	8
	14	dsl	1080	Nat 50A	1080	9.5
	15	dsl	900	S/B N7	720	8.5
	17	dsl	1080	Emsco GB350	720	8
	24	dsl	380	Nat T32	380	7
	26	dsl	380	Nat T32	380	7
	28	dsl	1440	Nat 55	1440	11
	30	dsl		Kutryk KS1		5
	32	dsl	380	Fail 2500	210	3
	33	dsl	380	G-D 3000	235	3.5
	34	dsl	380	Idco H25CD	380	4.5
	35	dsl	380	Fail 2500	180	3
	38	dsl	380	Fail 2500	180	3
	39	dsl	380	Fail 3500	235	3.5
	40	dsl	380	Fail 2500	180	3
	50	dsl	380	Fail 2500	180	3
BRITISH COLUMBIA						
Adeco Drlg & Engr	6	dsl	1500	Nat 100M	2340	18
Atco Drlg Bow Island Div	4	dsl	275	W-N 2000	275	2.9
Bawden Drlg	8	d-e	2200	Olwl 860	1400	20
	25E	d-s	2000	Emsco C1 Type II	1500	18
Challenger Drlg-Calgary	15	dsl	800	Idco Sup 711	1300	12.5
	4-E	d-e	1170	Nat T45	1005	9
Hi Tower Drlg	12	dsl	280	Nat T32	335	6.5
	14	dsl	280	Olwl 52T	350	6.5
	21E	d-e	3200	Emsco D3	1000	15
Jade Drlg	4	dsl	625	Idco H25	430	7.5
Kenting Drlg	7	dsl	720	Emsco GC500	720	10.5
Loffland Bros	3	dsl	1850	MC U914A	2880	18
Montgomery Drlg	46	d-e	2000	Nat 1320UE	2000	20
Nabors Drlg	3	dsl	1700	Olwl 76	1326	14
	6	dsl	300	Idco H35	300	6
	9	dsl	2000	Nat 110	2250	18
Parker Drlg	94	dsl	1700	Nat 100M	1000	18
Regent Drlg	2	dsl	840	S/B N55	820	9.5
	26	dsl	840	Idco H40	330	7.5
	12-E	dsl	2200	G-D 1500	2592	20
Westburne Drlg Canada	22	dsl	1010	Nat 50A	720	8.5
MANITOBA						
Concept Resources	1	dsl	500	Emsco GA250	300	7.5
Crown Drlg	2	dsl	784	S-H 5000	476	5
	4	dsl	714	MC U34	382	6
Red Arrow Drlg	2	dsl	225	Nat T12	275	5
Spartan Drlg	14	d-m	500	Sup 300	300	5.5
NEW BRUNSWICK						
Bawden Drlg	52	dsl	380	Nat 42-23T	450	3.5
NORTHWEST TERRITORIES						
Adeco Drlg & Engr	4	dsl	1380	OIME Hellhoist 1500	2000	17
Hi Tower Drlg	17					
Kenting Drlg	32-E	d-e	3720	Nat 110UE	2000	18
Kenting Drlg	33-E	d-e	1000	Sup 700E	700	9

SPARTAN
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(403) 262-7778

CANADA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
NORTHWEST TERRITORIES (Cont'd)						
Pan Arctic Drlg	A	d-s	1600	OIME 1000E	1000	12
	B	d-s	1000	Nat 80E	800	12
	C	d-s	1600	OIME 1000E	1000	12
Parker Drlg	99-HH/6	dsl	1500	OIME Helihoist 1500	1500	17

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Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Spartan Drlg	10	d-e	2000	Emsco E	2000	24
ONTARIO						
Underwater Gas Dev	6			I-R T5	400	5
QUEBEC						
Regent Drlg	6	dsl	1400	S/B N45	1400	14
SASKATCHEWAN						
Argus Drlg Div Taro Inds	3	dsl	320	MC U34	319	6
Atco Drlg Bow Island Div	1	dsl	275	W-N 2000	275	2.9
	3	dsl	275	W-N 2000	275	2.9
	5	dsl	275	W-N 2000	275	2.9
	18	dsl	275	Nat T12	300	5
Atco Drlg Mustang Div	32	dsl	300	S/B N4		5.5
	33	dsl	300	Nat T20	300	5.5
	51	dsl	300	Idco H25	350	6
Badger Drlg	1	dsl	400	Idco H30	350	5.9
Blocker Drlg	3	dsl	770	OIME 750SL	1155	14
Cactus Drlg	11	dsl	350	MC U34	350	6.5
Concept Resources	2	dsl	450	Emsco Modified 150	300	6.5
Ensign Drlg	1	dsl	440	Cbot 44	290	6600
Guthrie McLaren Drlg	7	dsl	300	Nat T32	300	7/3.5''
Jade Drlg	1	dsl	450	Wils Super 38	300	3.5
	2	dsl	400	Wils Super 38	300	3.5
Precision Drlg	2	dsl	350	Idco H20AD	350	4.5
	3	dsl	350	Idco H30 Super 2FD	350	6.5
Red Arrow Drlg	11	dsl	225	RAD 200	275	6
	12	dsl	225	RAD 200	275	1.8
Sedco Drlg	80	dsl	375	Shaf 6000	456	6
	82		375	Sup 300	318	4.5
	84	dsl	320	Sup 300	318	4.5
	85		300	Sup 300	318	4.5
	87	dsl	300	Crdw L	318	4
	94	dsl	300	Crdw L	210	4
	98	dsl	350	Nat T20	456	6
Simmons Drlg	2	dsl	350	Troy 600	350	7.5
	4	dsl	350	Olwl 52T	350	6.8
	14	dsl	575	Troy M600	535	7.5
	15	dsl	350	MC U34	350	60
	22	dsl	350	Troy 300	350	6.5
	24	dsl	350	Troy 300	350	6.8

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Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Spartan Drlg	1	d-m	380	Sup 300	300	5.5
	5	d-m	380	Sup 300	300	5.9
	23	d-m	700	Sup 300	300	5.5
	27	d-m	380	Sup 300	300	6
Tri-City Drlg	6	dsl	250	Fail 2500	210	3
Westburne Drlg Canada	37	dsl	360	G-D 2500	180	3.5
	42	dsl	360	Nat T20	360	5.5

CENTRAL AMERICA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
BARBADOS						
Well Services	10			G-D 500		9
BELIZE						
Hughes Drlg	8	dsl	Cat 110	Idco H35	400	6.5
GUATEMALA						
Forex Neptune and/or Affil	30	d-e	3200	G-D	2000	21.7
	39	dsl	1300	Idco H525	500	9
	47	d-e	3200	G-D 1100E	1500	18

CENTRAL AMERICA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
GUATEMALA (Cont'd)						
Helmerich & Payne (Guatemala)	16	d-e	2600	HS1500	1500	18
	45	d-s	3000	Nat 1320UE	2000	25

EUROPE

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Preussag Aktiengesellschaft	ZA292	dsl	500	Salt	180	3
	900/2	dsl	1500	Cbot 2346	840	10
AUSTRIA						
Preussag Aktiengesellschaft	GH35	dsl	2000	DeMg GH35	1500	16.5
FRANCE						
Boldon Drlg	81	d-e	1800	Nat 80UE	2000	14.5/5''
COSIFOR	E-350	dsl	1500	Emsco 350	550	9
	N-110	dsl	2500	Nat 110	1500	18
	610E	d-e	1600	Nat 610E	800	12
Forasol	E-160	mch	100	Emsco 160	25	
	E900-1	d-s	2000	Idco 900	1600	12
	GD2100	el	3200	Nat 2100	4000	21
	H-25	mch	130	Idco 25	217	
	H-35	mch	800	Idco 35	900	5
	110-6	el	3200	Nat 110	4000	16
	110-8	el	2600	Nat 110	4000	16
	80-B1	d-s	2000	Nat 80	1600	12
	1320-1	el	3200	Nat 1320	4000	20
	1320-4	el	3200	Nat 1320	4000	20
	1625-3	d-s	3200	Nat 1625	4800	25
Forex Neptune and/or Affil	14	dsl	1600	Emsco GC500	500	10.8
	16	d-e	2900	Emsco 1100DE	1500	18
	17	dsl	2000	Emsco A800	800	12
	19	dsl	1650	Nat 55	780	10.8
	22	d-e	3200	G-D 2100	2300	25.4
	28	dsl	1200	Idco H25	250	4.4
	29	dsl	450	Nat 55	700	10.8
	59	dsl	1700	Emsco D2	900	10
GREECE						
SAIPEM	5889	d-e	3200	Idco E3000	3000	30
ICELAND						
Orkustofnun State Drlg Contrs	DOFRI	dsl	1350	Olwl 52T	320	7.3
	GLAUMUR	dsl	290	Fail 2000	290	3.7/2.88''
	JOTUNN	d-e	1500	G-D 700E	750	14
	NARFI	dsl	580	Fail 3000	290	6/3.5''
	YMIR	dsl	180	May 1000	180	1.8/2.37''
ITALY						
Forasol	80-B3	d-s	2600	Nat 80	2400	12
	80-B4	d-s	2600	Nat 80		12
Pool-Intairdril	211	e-s	1300	Idco 1700	2000	17
	212	e-s	1200	Idco 1200	1000	12.5
SAIPEM	5803	dsl	1400	Idco H711	885	11.4
	5829	d-e	2000	Emsco D3	1000	12
	5832	d-e	3200	Idco E2100	2000	20
	5833	d-e	3200	Idco E2100	2000	20
	5836	dsl	2600	Idco 1350S	1950	18
	5840	dsl	2600	Idco H1700	1700	16.5
	5844	dsl	1000	Idco H30		4
	5852	d-e	880	Idco E525	625	6
	5855	dsl	1800	Idco H1200	1740	13
	5856	dsl	1700	Idco H1200	1740	13
	5858	dsl	1135	Idco H40	432	6
	5864	d-e	3200	Emsco C3 Type II	3000	30
	5870	d-e	3200	Nat 1625 DE	3000	25
	5872	d-e	2600	Nat 1625 DE	3000	25
	5888	d-e	3200	Nat 1625 DE	3000	25
	5891	d-e	3200	Nat 110UE	1600	17
	5892	d-e	3200	Nat 110UE	1600	17
	5898	d-e	2600	Idco HE1700	1600	16.5
	5899	dsl	1400	Crdw 03	1050	10.4
NETHERLANDS						
Deutsche Tiefbohr	T-19	dsl	2600	Nat 80BE	1000	14
	T-27	d-e	3200	Nat 130	1625	20
	T-32	dsl	420	Idco H35KD	300	3
	T-40	d-e	2600	Nat 80B	1000	15
SPAIN						
Compania Gen De Sondeos SA	1	dsl	1050	Emsco G450	450	10
	2	dsl	2700	Nat T2029	2000	19.7
	3	dsl	1200	S/B 650	575	8.5
	4	dsl	2400	G-D 800	1500	14.8
	5	d-e	2600	Nat 1320UE	2500	20
Forasol	1320-3	d-s	3200	Nat 1320	3600	20
	1625-2	el	3200	Nat 1625	4000	25

EUROPE (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
SPAIN (Cont'd)						
Sonpetrol	GD-2	dsl	1100	G-D 500	600	10
	N-7	dsl	3200	Nat 1625	3000	25
	N-8	dsl	2000	Nat 80UE	1000	14
	N-9	el	2600	Nat 110	2750	16
SWITZERLAND						
Deutsche Tiefbohr	T-7	dsl	1300	Nat 80B	1000	11
TURKEY						
KCA Drlg	71	dsl	1800	Nat 80B	1000	12
	73	dsl	1800	Nat 80B	1000	12
UNITED KINGDOM						
Boldon Drlg	41	dsl	1300	Nat 600	475	8/5''
	61	d-e	1200	Olwl 660E	700	10/5''
Houlder Marine Drlg	2	d-e	1600	Sup 700E	1000	9
Kenting Drlg Serv	12	dsl	700	S/B N45	350	8/4''
	17	dsl	350	Fail 90	350	5/3.5''
	19	dsl	350	G-D 3000	230	4.5/3.5''
	21	d-e	2000	Nat 80UE	1000	14/5''
	26	dsl	700	Sup 400	350	7/4''
	31	d-e	2000	Nat 80UE	1000	14/5''
	34	d-e	1600	Nat 610UE	750	11.5
	36	d-e	1600	Sup 700UE	700	10
KCA Drlg	84	d-e	1600	Nat	600	10
	94	dsl		Cbot 550	375	4.5
WEST GERMANY						
Deutsche Tiefbohr	T-1	dsl	335	Idco H1000	910	8
	T-14	dsl	2400	Emsco A800	1000	14
	T-3	dsl	420	Idco H44CD	460	5
	T-30	d-e	1000	Idco E725D	725	6
	T-36	dsl	1600	Idco H1000	950	8
	T-4	dsl	500	Idco H30	455	6
	T-47	d-e	3900	Emsco C3	3000	30
	T-5	dsl	335	Idco H525D	910	5
	T-8	dsl	335	Idco H1000	910	8
	T-81	dsl	375	Coop LTO350	200	4
	T-82	dsl	375	Coop LTO350	200	4
	T-83	dsl		Salt ZA198	200	
	T-84	dsl		Salt ZA198	200	
	T-85	dsl		Salt ZA198	200	
	T-92	dsl		H-L 6205	130	
	T-93	dsl		H-L 6205	130	
	T-94	dsl		H-L 6205	130	
	T45	d-e	2600	Emsco C2	2000	20
Preussag Aktiengesellschaft	GH-25	dsl	2000	Wirth GH25	1500	14
	900/1	dsl	1500	Cbot 2346	840	10
	900/3	dsl	1450	Cbot 2346	900	10
	1320UE	d-e	3200	Nat 3120UE	2000	25
Von Rautenkranz Hermann	ITAG 22	dsl	2500	Nat 110M		20
	ITAG-104	dsl	1000	Wils Mogul		8
	ITAG-108	dsl	1200	Wils M75		10
	ITAG-109	dsl	800	Wils M75		10
	ITAG-23	d-e	3000	Olwl 2000E		25

MIDDLE EAST

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
BAHRAIN						
Santa Fe Drlg	142	dsl	2600	Nat 110UE	1500	18
IRAQ						
SAIPEM	5843	d-e	2800	Olwl E2000	2000	20
	5848	dsl	2600	Idco H1700	1700	16.5
	5849	dsl	2600	Idco H1700	2000	16.5
KUWAIT						
Parker Drlg	189	d-e	3200	OIME 3000E	3000	30
Santa Fe Drlg	KDC 10					
	KDC 11					
	KDC 5					
	KDC 6					
	KDC 7					
	KDC 8	d-e	2800	OIWELL E2000	2000	20
	KDC 9	d-e	2800	Olwl E2000	2000	20
	90	d-e	2000	Nat 1320DE	2000	20
OMAN						
Deutsche Tiefbohr	T-17	d-e	2700	Nat 1320UE	1800	20
	T-18	dsl	3200	Nat 55	1000	11
	T-29	d-e	2600	Nat 1320ME	2000	20
	T-33	dsl	1600	Nat 55	1000	11
	T-34	dsl	1600	Idco H1000	950	8
Forex Neptune and/or Affil	12	dsl	1800	Idco Junior 1200	1400	11.5
	15	d-e	3200	G-D 1500 E	2000	21.7
	21	d-e	3200	G-D 2100E	2300	25.4
	23	d-e	3200	G-D 2100RE	3000	25.4
	32	d-e	3200	G-D 1100E	1500	18

MIDDLE EAST (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
OMAN (Cont'd)						
Forex Neptune and/or Affil	34	d-e	3200	G-D 1100	1500	18
	57	dsl	2000	Olwl 760	1000	15
	58	dsl	2000	Nat 80B	1000	15.7
Pool-Intairdril	6	dsl	600	Cbot 750	650	7.5
QATAR						
Deutsche Tiefbohr	T-6	dsl	500	Idco H1000	910	8
Santa Fe Drlg	89	d-e	2000	Nat 110UE	1800	16
	131					
SAUDI ARABIA						
Arabian Drlg	AD10	dsl	750	I-R 2042/160	700	10
	AD3	d-e	2950	Idco Super711	2000	16
	AD4	d-e	2100	Nat 110UE	2000	14
	AD5	dsl	750	MC U36A	850	10
	AD6	dsl	750	MC U36A	850	10
	AD7	dsl	750	Nat 370	800	10
	AD9	dsl	750	I-R 2042/160	700	10
Blocker Drlg	7	dsl	1400	Cbot 900	950	10
	19	dsl	1475	Cbot 2346	950	10
Loffland Bros	126	d-e	3200	MC U1220EBD	2000	25
	127	d-e	3200	MC U1220EBD	2000	25
	128	d-e	3200	MC U1220EDB	2000	25
Pool Arabia	15	dsl	420	Idco BIR550	420	6.5
	23	dsl	300	Idco H40	450	8
	29	dsl	420	Cbot 1058	420	6
	40	dsl	600	Cbot 700	600	6.5
	128	dsl	600	Cbot III	450	6.5
	138	dsl	450	Cbot	450	6.5
	190	dsl	550	Cbot	700	7.5
	191	dsl	550	Cbot	700	7.5
	192	dsl	500	I-R 2042/160	700	8.5
	193	dsl	500	I-R 2042/160	700	8.5
	194	dsl	750	I-R 2042/160	700	8.5
	195	dsl	750	I-R 2042/160	700	8.5
	201	dsl	1400	Olwl	1000	12
	202	dsl	1400	Olwl	1000	12
	203	dsl	1400	Olwl	1000	12
Santa Fe Drlg	67	d-e	2400	Nat 1320DE	3400	20
	70	d-e	2000	Nat 1320DE	3400	20
	101	d-e	2600	Nat 110UE	1500	16
	109	d-e	2000	Nat 110UE	1800	16
SHARJAH						
SAIPEM	5828	d-e	3200	Idco E2100	2000	20
	5887	d-e	3200	Nat 1625 DE	3000	25
SYRIA						
Forex Neptune and/or Affil	18	dsl	900	Idco H40	500	9
	25	d-e	3200	G-D 2100RE	3000	25.4
	36	d-e	3200	G-D	1600	18
UNITED ARAB EMIRATES						
Forex Neptune and/or Affil	40	d-e	2000	Nat 80UE	1000	15.7
	56	dsl	2000	Nat 80B	1000	15.7
Geoprosco Intl	36	dsl	725	Idco H900	725	10
	42	d-e	725	Idco ED900	1000	10
	43	d-e	700	Idco ED900	1000	10
National Drlg	1					
	2					
	8					
	9					
	10					
	11					
Pool-Intairdril	213	el	900	Idco 900	1000	10.5
	214	el	900	Idco 900	1000	10.5
	215	el	900	Idco 900	1000	10.5
Santa Fe Drlg	93	d-e	1700	Nat 80UE	700	12
	104	d-e	3400	Nat 1100UE	1500	16
	121	d-e	3400	Olwl 2000E	3000	25
	139	dsl	3400	Olwl E2000	2000	25
	144					
	145					
Sedco Inc	91	d-e	3400	Nat 110UE	2000	16
	95	d-e	3400	Nat 1320UE	2000	20
	96	d-e	3400	Olwl E2000	2000	20
	97	d-e	3400	Olwl E2000	2000	20
Sonat Offshore Drlg	14	dsl	2600	Emsco C2 Type II	2000	20

SOUTH AMERICA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
ARGENTINA						
Compania Naviera Perez Companc	1	dsl	1400	Crdw J450	700	6.9
	2	dsl	1400	Crdw J450	700	6.9
	3	dsl	1400	Crdw J450	700	6.9
	4	dsl	1400	Crdw J450	700	6.9
	5	dsl	1400	Crdw KM250	350	5.9
	6	dsl	1400	Crdw KM250	350	5.9
	29	dsl	1600	G-D 700	700	10
	36	dsl	1600	G-D 800	1050	12
	37	dsl	1400	Crdw KB210	350	5.9

SOUTH AMERICA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
ARGENTINA (Cont'd)						
Compania Naviera Perez Companc	42	dsl	1000	G-D 700	1700	10
	45	d-e	2600	Idco E1700	1700	15.2
	46	dsl	1500	G-D 500M	700	10
Quitral-Co SAIC	P-01	d-e	2000	Emsco Electrohoist II	2100	16.5
	P-02	d-e	2000	Emsco Electrohoist II	2100	18
	P-07	dsl	1200	Idco H40	450	6.5
	P-08	dsl	1500	MC U36	900	10
	P-12	dsl	1500	Wils	520	2
Rio Colorado SA	E-101	dsl	1250	MC U36A	700	10
	E-102	dsl	1250	MC U36A	1000	10
	E-103	dsl	1250	MC U36A	1000	10
	E-104	dsl	1000	Idco H525	800	10
	E-105	dsl	1000	Emsco GC350	800	9
	E-106	dsl	1000	Emsco GC350T	1000	9
	E-107	dsl	1800	Nat 100N	1500	16
	E-108	dsl	1250	Nat	800	10
	E-109	dsl	1250	Nat N75	1500	11
	E-110	dsl	1000	!dco H40	500	8
	E-111	dsl	1500	G-D 800DW	900	11
	E-112	dsl	1000	Idco H40	500	6.5
	E-113	dsl	1600	G-D 800DW	1200	12
	E-125	dsl	880	Idco H37	500	6.5
	E-126	dsl	2600	Nat 1320UE	2000	20
	E-127	d-e	2660	G-D 1500E	2000	20
	E-128	d-e	1140	Idco E525	1000	10
	E-129	dsl	1600	Nat 75	1000	10
	E-130	dsl	1320	Idco H40	450	8
	E-132	dsl	1320	Idco H40	550	8
	E-134	d-e	2600	Nat 1625DE	3000	25
	E-137	dsl	1900	Idco H1200	2500	15
	E-301	dsl	230	Crdw KB500	380	12
	E-302	dsl	160	W-M 1538B	380	11
	E-307	dsl	160	Idco H-25	380	10
	E-309	dsl	230	Idco KB210A	280	10
	E-310	dsl	230	Crdw KB200C	380	10
	E-317	dsl	550	Crdw KB200C	370	10
	E-318	dsl	550	Idco H30	230	11
	E-319	dsl	550	Idco H30	230	11
	E-320	dsl	550	Idco H30	230	11
	E-323	dsl	550	Idco H30	230	11
	135	dsl	1100	Idco H40	600	8
	136	dsl		Idco H40		8
	146	dsl				15
	303	dsl		W-M 1538B		11
	304	dsl		W-M 1538B		11
	305	dsl		Wils Super 38		11
	306	dsl		Crdw K210A		10
	308	dsl		Crdw K200		10
	311	dsl		Wils Super 38		11
	312	dsl		Crdw KB150		9
	321	dsl		Idco M20D		8.5
	322	dsl		Idco M20D		8.5
	324	dsl		Idco M20D		8.5
	325	dsl		Idco H25		9.5
	326	dsl		Crdw KB210A		10
	327	dsl		Idco H20		8.5
BOLIVIA						
Helmerich & Payne Rasco	9	d-e	1600	HS1500	1500	18
	11	d-e	1600	HS1500	1500	18
BRAZIL						
Odebrecht Perfuracoes	EG-1			Idco 2000		200/5''
	EG-2			Idco 2000		200/5''
Parker Drlg	132-HH/20	dsl	1500	OIME TBA2000	1500	20
	134-HH/22	dsl	1500	OIME TBA2000	1500	20
	151-HH/34	dsl	1500	OIME TBA2000	1500	20
	185-HH/40	dsl	2000	OIME TBA2000	2000	20
Rio Colorado SA	E-121	d-e	2600	S/B N95A	2000	16
	E-122	d-e	2600	S/B N95A	2000	16
	E-123	d-e	2600	Nat 1320E	2000	20
	E-124	d-e	2600	Nat 1320E	2000	20
COLOMBIA						
Helmerich & Payne (Colombia)	7	d-e	2000	HS1500	1500	18
	10	d-e	1600	HS1500	1500	18
Parker Drlg	104	dsl	1500	Nat 50A	1500	10
	158	dsl	1500	Nat 80B	1500	14
	209	dsl	750	Nat 50	750	10
	216	dsl	3200	OIME 2000M	3200	25
	110-HH/9	dsl	1500	OIME HH1500	1500	17
	197-HH/43	dsl	2000	OIME TBA2000	2000	20
Pool-Intairdril	207	dsl	400	Wils Mogul 42	400	
	208	dsl	2000	OIME	1000	12

SOUTH AMERICA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
COLOMBIA (Cont'd)						
Pool-Intairdril	209	dsl	2000	OIME	1000	12
Rio Colorado SA	144	dsl		S/B N85		14
ECUADOR						
Helmerich & Payne Del Ecuador	12	d-e	1600	HS1500	1500	16
	18	dsl	600	Coop LTO550	350	6
Parker Drlg	135	dsl	1500	OIME TBA2000	1500	20
	159	dsl	2200	Olwl 76	1560	15
	219	dsl	3200	OIME 2000M	3200	25
Pool-Intairdril	126	dsl	230	Wils Mogul 42	450	6.5
	210	dsl	400	Wils DD42428	450	3
	217	dsl	400	Idco H37	450	
PERU						
Blocker Intl	21	dsl	550	Idco H37	456	7
	22	dsl	550	Idco H37	456	7
	23	dsl	550	Idco H37	456	7
	24	dsl	550	Idco H37	456	7
	31					15
	34					15
Parker Drlg	155	dsl	1500	OIME TBA2000	1500	20
	206	dsl	2000	OIME TBA2000	2000	20
	207	dsl	2000	OIME TBA2000	2000	20
	107-HH/4	dsl	1500	OIME HH1250A	1500	15
	108-HH/5	dsl	1500	OIME HH1500	1500	15
	127-HH/15	dsl	1500	OIME TBA2000	1500	20
	131-HH/19	dsl	1500	OIME TBA2000	1500	20
	144-HH/30	dsl	1500	OIME TBA2000	1500	20
	145-HH/31	dsl	1500	OIME TBA2000	1500	20
	154-HH/35	dsl	1500	OIME TBA2000	1500	20
Rio Colorado SA	E-114	dsl	900	Crdw KT250	500	6
	E-115	dsl	900	Crdw KT250	500	6
	E-116	dsl	900	Crdw KT250	500	6
	E-117	dsl	900	Crdw KT250	500	6
	E-118	dsl	600	I-R RT5	200	3
	313	dsl		Crdw KB150		9
	314	dsl		Crdw KB150		9
	315	dsl		Crdw KB150		9
	316	dsl		Crdw KB150		9
TRINIDAD						
Skinner Marine Oper	15	dsl	280	Cbot 200CA Rocket	280	3
	16	dsl	660	Cbot 1287	300	4
	17	dsl	1200	Olwl 660		9
	18	d-e	4000	Olwl 840E	2000	16
Well Services	1			G-D 500		9
	2			G-D 500		9
	4			Nat T32		6.5
	9			Nat 132		20
VENEZUELA						
Helmerich & Payne CA	3	dsl	600	Idco H37	600	6
	6	dsl	300	Idco H44	400	5
	14	dsl	600	Idco H37	400	6
	17	dsl	600	Coop LTO550	600	6
	19	dsl	600	Coop LTO550	600	6
	20	dsl	600	Coop LTO550	600	6
	21	dsl	600	Coop LTO550	600	6
	28	dsl	1500	Nat 110	1500	18
	30	dsl	1200	Idco H525	1200	10
	31	dsl	1200	Idco H525	1000	10
	67	dsl	1500	Nat 110	1500	18
Loffland Bros	14	dsl	700	MC U36A	785	9
	24	d-e	2000	Nat 100E	2000	16
	41	dsl	2000	MC U914C	2000	20
	54	d-e	2900	MC U1220EB	3300	28
	61	dsl	500	Idco H525	586	6.5
	68	d-e	3200	MC U1220EB	3300	28
	94	d-e	2000	MC U20E	1900	16
Santa Fe Drlg	2	dsl	1700	Nat 130	1800	20
	3	dsl	800	Idco 525	600	9
	8	dsl	2200	Nat 130	1800	20
	9	dsl	1850	Nat 130	1800	20
	16	dsl	600	Nat T32	250	5
	20	dsl	800	Idco H40D	350	7
	21	dsl	1200	MC U914B	1800	20
	22	dsl	350	Idco H35	350	5
	24	dsl	350	Idco H35	350	5
	110	d-e	2000	Nat 1320UE	2000	20
	115	d-e	2000	Nat 1320DE	3400	20
	119	d-e	2800	Olwl E2000	2000	20
	125	dsl	800	Hoop GXTA	450	6
	129	dsl	1700	G-D 500M	650	9

Petroleum Engineer INTERNATIONAL

International Contract Offshore Drilling Rigs

AFRICA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
UNDESIGNATED							
Ocean Drlg & Expl/Ben Ocean Typhoon	DS	13.63	5	Nat 1320UE	25	600	Stacked
Ocean Drlg & Expl/Ocean Tide	JU	13.63	10	Nat 1320DE	25	250	Drilling
ANGOLA							
Global Marine Drlg/Glomar Adriatic II	JU	13.63	10	Nat 1625DE	25	300	Drilling
Sedco Inc/Sedco 135G	SS	18.75	10	Olwl E3000	20	800	Drilling
Sedco Inc/Sedneth Luanda	JU	13.63	10	Nat 1320UE	20	200	Drilling
BENIN							
Odfjell Drlg & Consulting/Amazone	JU						Drilling
CABINDA							
Keydril/Key Largo	JU	13.63	10	Olwl E3000	30	300	Drilling
Keydril/Key Victoria	JU	13.63	5	Olwl E2000	25	260	Drilling
Sedco Inc/Sedco 251	JU	13.63	10	Emsco C2	20	250	Drilling
CAMEROON							
Atwood Oceanics Pacific/Richmond	S	13.63	10	Nat 1320UE	20/5"	70	Stacked
Cosifor/Navifor I	T	16.75	5	Nat 1320UE	20	350	Tending
Cosifor/Navifor II	T	13.63	5	Nat 1320UE	20	400	Stacked
Foramer/Ile de la Reunion	T	13.63	5	Nat 110DE	16	250	Drilling
Forex Neptune and/or Affil/Searex 2	T	11.00	10	G-D 500E	11	350	Workover
Forex Neptune and/or Affil/Trident IV	JU	13.63	10	G-D 2100E	20	300	Drilling
Forex Neptune and/or Affil/Trident VII	JU	13.63	10	G-D 1500E	18	132	Drilling
Western Oceanic/Western Polaris I	JU	13.63	10	Nat 1320UE	20	250	Drilling
Western Oceanic/Western Polaris II	JU	13.63	10	Nat 1320UE	20	250	Drilling
CONGO							
Cosifor/Navifor III	T	16.75	5	Nat 1320UE	20	400	Tending
Cosifor/Navifor Norse	DS	16.63	10	Nat 1320UE	20	600	Drilling
Foramer/Barracuda	T	16.75	5	Nat 1320DE	20	400	Drilling
Foramer/Ile de Sein	T	16.75	5	Nat 1320DE	20	400	Drilling
EGYPT							
Chiles Drlg/Texas Star	JU	13.63	10	Nat 110UE	16	150	Drilling
Dixilyn-Field Drlg/DF82	JU	13.63	10	Nat 1320UE	20	250	Drilling
Egyptian Drlg/EDC Rig 22	P	13.63	5	Emsco WS1B	17		Drilling
Egyptian Drlg/Senusret	JU			Olwl 2000E	25	250	Drilling
Egyptian Drlg/Sneferu	JU			Olwl 2000E	25	225	Drilling
Foramer/Ile d'Amsterdam	JU	13.63	10	Nat 1320UE	20	300	Stacked
Global Marine Drlg/Glomar Adriatic VIII	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar High Island II	JU	13.63	10	Nat 1320UE	20	250	Drilling
Japan Drlg/Hakuryu I	JU	13.63	5	Niigata NM4000	14	100	Drilling
Maersk Drlg/Maersk Viking	JU	13.63	10	Olwl E2000	20	300	Drilling
Magnum Marine/H L Cecil	JU	13.63	10	Sup 2000E	25	200	Drilling
Penrod Drlg/95	JU	13.63	10	Nat 1320UE	25	250	Stacked
Reading & Bates/E W Thornton	DS	20.00	5	Olwl E3000	25.5	600	Stacked
Reading & Bates/W B Tyson	JU	13.63	10	Nat 1625DE	25	300	Drilling
Saipem/Perro Negro 4	JU	13.63	5	Nat 110UE	16	150	Drilling
Saipem/5834	P	11.00	5	Idco E2100	20		Drilling
Santa Fe Drlg/Santa Fe Mariner I	SS	16.75	5	Nat 1320UE	20	600	Stacked
Santa Fe Drlg/105	JU	21.25	5	Emsco C2	20	250	Drilling
Santa Fe Drlg/124	JU	13.63	5	Nat 1625DE	20	250	Drilling
Santa Fe Drlg/136	JU	13.63	10	Nat 1320UE	20	250	Drilling
Santa Fe Drlg/141	JU	13.63	10	Olwl E2000	20	250	Drilling
Sonat Interocean Drlg SA/Interocean III	JU	13.63	10	Nat 1320UE	20	307	Drilling
Sonat Offshore Drlg/Discoverer I	T	12.00	3	Nat 80B	12	600	Drilling
Sonat Offshore Drlg/Offshore Aquarius	JU	13.63	5	Olwl E2000	20	250	Drilling
Sonat Offshore Drlg/Offshore Comet	JU	13.63	10	Nat 1320UE	20	225	Drilling
Sonat Offshore Drlg/Offshore Mercury	JU	13.63	10	Nat 1320DE	20	250	Drilling
Sonat Offshore Drlg/Offshore Taurus	JU	13.63	10	MC U1220BE	20	250	Stacked
Western Oceanic/Western Triton I	JU	13.63	10	Nat 1320UE	20	250	Drilling
EQUATORIAL GUINEA							
Foramer/Asterie	SS	18.75	10	G-D 2100DE	25	800	Drilling
GABON							
Foramer/Ile d'Ouessant	T	10.00	5	Idco H525	8	360	Stacked
Foramer/Ile de la Martinique	T	16.75	5	Nat 1320DE	20	360	Stacked
Foramer/Ile de Re	T	16.75	5	Nat 1320DE	20	300	Stacked
Forex Neptune and/or Affil/Searex I	T	16.75	5	G-D 1100E	18	200	Stacked
Forex Neptune and/or Affil/Trident IX	JU	13.63	10	G-D 1500E	18	400	Standby
Global Marine Drlg/Glomar Adriatic I	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar High Island III	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar High Island V	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar Main Pass I	JU	13.63	10	Nat 1625DE	25	300	Drilling
Keydril/Key Gibraltar	JU	13.63	10	Olwl E2000	25	300	Stacked
Transworld Drlg/46	S	13.63	5	Emsco EDA460	20	70	Stacked
IVORY COAST							
J L Offshore/Dan Duke	JU	13.63	10	Nat 1320UE	20	300	Drilling
Reading & Bates/Douglas Carver	DS	20.00	10	Nat 1625DE	25	750	Drilling
Southeastern Drlg Serv/Sedco J	SS	21.25	2	Olwl E3000	25	800	Drilling
LIBYA							
Saipem/Perro Negro 3	JU	13.58	10	Idco E2100	21	300	Drilling
Saipem/Scarabeo 3	SS	18.75	10	Nat 1625	25	1300	Drilling
MOROCCO							
Sedco Inc/Sedco H	SS	18.75	10	Olwl 3000	20	600	Drilling

AFRICA (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
NIGERIA							
Forex Neptune and/or Affil/Belle Isle	B	13.63	5	Emsco 1500UE	18	22	Drilling
Forex Neptune and/or Affil/Lutece	B	13.63	5	Idco 2500E	20	22	Drilling
Forex Neptune and/or Affil/Trident VIII	JU	13.63	10	G-D 1500E	18	300	Drilling
Keydril/Key Bermuda	JU	13.63	10	Olwl 2000	20	200	Drilling
Santa Fe Drlg/Swamp Master	B	13.63	5	Idco 2500E	20	22	Drilling
Santa Fe Drlg/Swamp Queen	B	20.00	5	Nat 1320	20	22	Stacked
Sea Drlg Netherlands/Sedneth I	SS	16.75	5	Olwl E3000	20	600	Drilling
Sedco Inc/Sedco 253	JU	13.63	10	Emsco C2	20	250	Drilling
Western Offshore/Mr Sage	JU	13.63	5	Nat 1320UE	20	200	Drilling
NORTH AFRICA							
Maersk Drlg/Maersk Endurer	JU	13.63	10	Olwl E2000	20	250	Drilling
SOMALIA							
Pacnorse Drlg SA/Pacnorse I	DS	16.75	10	Emsco C3	25	3000	Drilling
SOUTH AFRICA							
Foramer/Actinia	SS	18.75	10	Nat 1625			Drilling
Sedco Maritime/Sedco K	SS	21.25	10	Olwl E3000	25	900	Drilling
TANZANIA							
Blocker Drlg & Marine/Vermilion Bay	B	13.63	10		30		Drilling
TUNISIA							
Blocker Drlg & Marine/Trinity Bay	B	13.63	10	Idco E3000	30		Stacked
Global Marine Drlg/Glomar High Island VIII	JU	13.63	10	Nat 1320UE	20	250	Drilling
Keydril/Galveston Key	JU	13.63	10	Emsco C3 Type 2	30	300	Stacked

ASIA PACIFIC

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
AUSTRALIA							
Atwood Oceanics Pacific/Energy Searcher	DS	18.75	10	G-D 3000E	25/5"	1500	Drilling
Atwood Oceanics Pacific/Regional Endeavour	DS	18.75	10	Nat 1320UE	20/5"	1500	Drilling
Diamond M/Epoch	SS	16.75	10	Olwl E3000	30	1200	Stacked
Foramer/Nymphea	SS	18.75	10	Nat 1625			Drilling
Global Marine Drlg/Glomar Main Pass III	JU	13.63	10	Nat 1625DE	25	300	Drilling
Loffland Bros/95	P	13.63	5	MC U1220	20		Drilling
Maersk Drlg/Maersk Valiant	JU	13.63	10	Olwl E2000	20	300	Drilling
Ocean Drlg & Expl/Ocean Digger	SS	18.75	10	Emsco A1500	25	600	Drilling
Pool Australia/110	P			I-R 2042	7.5		Stacked
Richter Drlg Pty/10	P	13.63	5	Nat 110UE	16		Drilling
Richter Drlg Pty/12	P	13.63	5	Nat 110UE	16		Drilling
Sedco Inc/Sedco 600	SS	18.75	10	Emsco C2 Type II	20	1800	Drilling
South Seas Drlg/Southern Cross	SS	18.75	10	Olwl E2000	20	1500	Drilling
BORNEO							
Rowan Intl/Rowan Fairbanks	B	13.63	5	Nat 1320UE	25	20	Drilling
Rowan Intl/Rowan Morgan City	B	13.63	5	Nat 1320UE	25	20	Drilling
BRUNEI							
Foramer/Petrel	DS	16.75	10	Nat 1625DE	25	2000	Drilling
Reading & Bates/Harvey H Ward	JU	13.63	10	Nat 1625	25	300	Drilling
Reading & Bates/I J Pierce	PT	20.00	5	Olwl 840E	18		Drilling
Reading & Bates/J W Nickles	PT	20.00	5	Olwl 840E	18		Drilling
Sedco Inc/Sedco 135A	SS			Olwl E3000	25	600	Stacked
Sedco Inc/Sedco 135E	SS	20.00		Olwl 3000	25	600	Drilling
Southeastern Ocean Drlg/Sedco 135A	SS	13.63	5	Olwl 3000	25	600	Stacked
CHINA							
China Natl Offshore Oil Corp/Nan Hai II	SS	18.75	10	Emsco	25	1000	Drilling
Japan Drlg/Hakuryu 9	JU	13.63	10	Nat 1320UE	23.5	186	Drilling
JFP Well Serv/JFP Nine	JU	13.63	10	Olwl 840E	15	150	Stacked
Reading & Bates/Jim Cunningham	SS	18.75	10	Nat 1625DE	25	1500	Drilling
Sedco Inc/Sedco 602	SS	18.75	10	Emsco C2 Type II	20	1800	Drilling
Western Offshore/IX	DS	18.75	10	Nat 1625DE	25	750	Drilling
Zapata Offshore/Zapata Arctic	SS	18.75	15	Emsco C3	25	2000	Drilling
HONG KONG							
Western Offshore/VIII	DS	16.75	5	Nat 1625DE	25	600	Drilling
INDIA							
Atwood Oceanics Pacific/Gettysburg	B	18.75	10	Nat 1320	20/5"	600	Drilling
Atwood Oceanics Pacific/Shenandoah	JU	13.63	10	Emsco C2	20/5"	300	Drilling
Dixilyn-Field Drlg/DF95	SS	18.75	10	Nat 1625DE	25	800	Drilling
Griffin-Alexander Drlg/G-A I	JU	13.63	10	MC EB1220	25	200	Drilling
Reading & Bates/W T Adams	JU	13.63	10	Nat 1525E	25	300	Drilling
Sedco Intl SA/Sedco 445	DS	16.75	10	Olwl E3000	25	3000	Drilling
Western Oceanic/Western Triton II	JU	13.63	10	Nat 1320	20	250	Drilling
Zapata Offshore/Miss Kitty	JU	13.63	10	Nat 1625	25	300	Drilling
INDONESIA							
Atwood Oceanics Pacific/Margie	SS	18.75	10	Nat 1320	20/5"	600	Drilling
Dual Drlg/Rig 38	JU	13.63	5	Olwl E2000	20	300	Drilling
Dual Drlg/Rig 42	JU	13.63	5	Olwl E2000	20	300	Drilling
Foramer/Alligator	T	13.63	10	Nat 110UE	16/5"	450	Drilling

ASIA PACIFIC (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
INDONESIA (Cont'd)							
Foramer/Bintang K	B	13.63	10	Nat 1320			Drilling
Forex Neptune and/or Affil/Gavrinis (Rig 37)	B	13.63	5	Nat 110UE	18	25	Drilling
Forex Neptune and/or Affil/Izenah (Rig 38)	B	13.63	5	Nat 110UE	18	25	Drilling
Global Marine Drlg/Glomar Conception	DS	18.75	10	Nat 1625DE	25	600	Drilling
Global Marine Drlg/Glomar Grand Isle	DS	18.75	10	Nat 1625DE	25	600	Drilling
Global Marine Drlg/Glomar Robert F Bauer	DS	18.75	10	Nat 1625DE	25	2500	Drilling
Japan Drlg/Hakuryu IV	JU	13.63	10	Nat 1625DE	29	295	Drilling
Penrod Drlg/93	JU	13.63	10	Nat 1320UE	25	250	Drilling
Reading & Bates/Charley Graves	PT	20.00	10	Nat 1320UE	25		Drilling
Reading & Bates/Chris Seger	JU	29.50	10	Idco 2500	20	210	Drilling
Reading & Bates/D K McIntosh	JU	30.00	10	Nat 1320	20	260	Drilling
Reading & Bates/J W Bates	DS	20.00	10	Nat 1320UE	20	600	Drilling
Reading & Bates/J W McLean	JU	20.00	10	Nat 130	20	225	Drilling
Reading & Bates/W D Kent	P	13.63	5	Nat 1320UE	25		Drilling
Santa Fe Drlg/127	JU	13.63	5	Nat 1320UE	20	250	Drilling
Santa Fe Drlg/134	JU	21.25	10	Nat 1320UE	20	250	Drilling
Zapata Offshore/Enterprise	JU			Emsco C3 Type II	20	200	Drilling
JAPAN							
Dyvi Offshore AS/Dyvi Stena	SS	18.75	15	Emsco C3	25	200	Under Construction
Japan Drlg/Hakuryu II	SS	13.63	10	Emsco C3 Type II	35	656	Drilling
Japan Drlg/Hakuryu V	SS	18.75	10	Emsco C3 Type II	35	1640	Drilling
JFP Well Serv/JFP Eleven	JU	13.38	10	Olwl E2000	30/5"	350	Stacked
Sonat Offshore Drlg/Henry Goodrich							Under Construction
Sonat Offshore Drlg/Polar Pioneer							Under Construction
MALAYSIA							
Dolphin Titan Intl/140	T	13.63	10	Nat 1320UE	20	225	Drilling
Foramer/Shiloh	T	16.75	5	Nat 1320DE	20	450	Drilling
Forex Neptune and/or Affil/Grand Large	T	13.63	5	G-D 1500UE	18	250	Drilling
Forex Neptune and/or Affil/Trident II	JU	13.63	10	G-D 2100RE	20	350	Drilling
Loffland Bros/46	P	13.63	5	MC U914CE	18		Stacked
Loffland Bros/47	P	13.63	5	MC U914	18		Standby
Pool Australia/448	P			Idco H725	7.5		Drilling
Pool Australia/450	P			Idco 1700E	20		Drilling
Reading & Bates/D R Stewart	JU	13.63	10	Olwl E3000	25	300	Drilling
Sonat Offshore Drlg/Discoverer III	DS	18.75	10	Net 1625	20	600	Drilling
SINGAPORE							
Atlantic Drlg/Benlomond	DS	18.75	10	Emsco C2	20/5"	750	Drilling
Atwood Oceanics Pacific/Chancellorsville	DS	18.75	10	Emsco C2	20/5"	1000	Stacked
Atwood Oceanics Pacific/Mission Viking	B	18.75	10	Nat 1625DE	20/5"	700	Stacked
Dolphin Titan Intl/143	T	13.63	10	Emsco A100E	20	150	Stacked
Japan Drlg/Hakuryu III	SS	18.75	10	Emsco C3 Type II	35	1000	Standby
Ocean Drlg & Expl/Ocean Hurricane	DS	16.75	10	Nat 1625	25	600	Stacked
Ocean Drlg & Expl/Ocean Prospector	SS	18.75	10	Emsco C3 Type II	25	1000	Stacked
Reading & Bates/Dickson M Saunders	JU	20.00	5	Nat 80B	15	160	Stacked
Santa Fe Drlg/Santa Fe Explorer	JU	20.00	5	MC U914	15	160	Stacked
Transocean Drlg/Transocean 7	JU	13.63	10	Emsco C3 Type II	25	300	Stacked
Western Offshore/VII	B	16.75	5	G-D 2100RE	25	600	Stacked
TAIWAN							
J L Offshore/Danwood Ice	DS	18.75	10	Nat 1320UE	20	1000	Drilling
THAILAND							
Great Eastern Drlg & Engrg/Eastern Princess	PT	13.63	5	Emsco C2	20	400	Drilling
Great Eastern Drlg & Engrg/Eastern Queen	PT	13.63	5	Emsco C2	20	400	Drilling
Great Eastern Drlg & Engrg/Seacrest	DS	18.75	10	Olwl E3000	25	1000	Drilling

CANADA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
UNDESIGNATED							
Canadian Marine Drlg/SSDC	S	13.63	10	Nat 1625	22		Stacked
Sonat Offshore Drlg/John Shaw	SS	18.75	10	Emsco C3 Type II	25	1500	Drilling
NEWFOUNDLAND							
Bow Valley Offshore Drlg/Bow Drill 3	SS	18.75	15	Nat 1625	/25	1500	Drilling
Sedco Maritime/Sedco 706	SS	18.75	10	Olwl E3000	25	1300	Drilling
NORTHWEST TERRITORIES							
Canadian Marine Drlg/Canmar Explorer I	DS	18.75	10	Idco 2100E	25/5"	600	Drilling
Canadian Marine Drlg/Canmar Explorer II	DS	18.75	10	Idco 2100E	25/5"	600	Drilling
Canadian Marine Drlg/Canmar Explorer III	DS	18.75	10	Nat 1625DE	25/5"	1500	Drilling
Canadian Marine Drlg/Canmar Explorer IV	DS	18.75	10	Emsco C3	20/5"	607	Drilling
Canadian Marine Drlg/CBIR 1	SS	20.75	3	Emsco C3	25/5"	26	Stacked
Canadian Marine Drlg/CBIR 2	SS	20.75	3	Nat 1625DE	/5"	26	Stacked
NOVA SCOTIA							
Bow Valley Offshore Drlg/Bow Drill One	SS	18.75	10	G-D 3000E	25	1200	Drilling
Bow Valley Offshore Drlg/Bow Drill 2	SS	18.75	15	Nat 1625	/25	1500	Drilling
Global Marine Drlg/Glomar Labrador I	JU	13.63	15	Nat 1625DE	25	300	Drilling
Marine Drlg SA/Sedco 709	SS	16.75	10	Olwl E3000	25	6000	Drilling
Rowan Co/Rowan Gorilla I	JU	13.63	10	Nat 1625UE	25	328	Drilling
Rowan Co/Rowan Juneaue	JU	13.63	15	Nat 1625	25	300	Drilling
Sedco Inc/706	SS	18.75	10	Olwl E3000	25	1000	Drilling
Sedco Inc/709	SS	16.75	10	Olwl E3000	25	6000	Drilling
Sedco Inc/710	SS	13.63	15	Olwl E3000	25	5000	Drilling
Zapata Offshore/31	JU	13.63	15	Nat 1625DE	25	200	Drilling

CANADA (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
ONTARIO							
Underwater Gas Dev/Mr Neil	P	10.00		Idco H525D	8/3-1/2"	80	Stacked
Underwater Gas Dev/Telesis	DS	8.00		Nat T20	5/3 1/2"	210	Drilling
Underwater Gas Dev/Timesaver II	P	8.00		Emsco GB250T	5/3 1/2"	100	Drilling

EUROPE

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
DENMARK							
Dyvi Offshore AS/Dyvi Epsilon	JU	13.63	10	Nat 1320UE	20	210	Drilling
J L Offshore/Dan Earl	JU	13.63	10	Nat 1320UE	20	205	Drilling
Maersk Drlg/Maersk Endeavour	JU	13.63	10	Nat 1320UE	20	251	Stacked
Maersk Drlg/Maersk Explorer	JU	13.63	10	Nat 1320UE	25	205	Drilling
FRANCE							
Foramer/Pelerin	DS	16.75	10	Nat 1625			Standby
Foramer/Pelican	DS	13.63	10	Nat 1625DE	25	1100	Stacked
GREECE							
Penrod Drlg/56	JU	13.63	10	Nat 1625DE	30	210	Stacked
ITALY							
Global Marine Drlg/Glomar Adriatic IV	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Biscay I	SS	18.75	10	Olwl E3000	25	1500	Drilling
Global Marine Drlg/Glomar Grand Banks	DS	18.75	10	Nat 1625DE	25	600	Drilling
J L Offshore/Dan Baron	DS	18.75	10	Idco E3000	20	1000	Drilling
Pool-Intairdril/446	P	13.63	5	OIME 1000	10		Drilling
Pool-Intairdril/447	P	13.63	5	OIME 1000	10		Stacked
Reading & Bates/Mr Jack	JU	20.00	10	Olwl E3000	25	300	Drilling
Reading & Bates/Roger W Mowell	JU	13.63	10	Nat 1625DE	25	300	Drilling
Saipem/Perro Negro	JU	13.63	10	Idco PE2500	21	130	Drilling
Saipem/Perro Negro 2	JU	13.58	10	Olwl E2000	21	300	Drilling
Saipem/Saipem Due	DS	16.75	5	Nat 1625	25	1000	Drilling
Saipem/Scarabeo 2	SS	18.75	10	Idco PE2500	21	600	Drilling
Saipem/53	P	11.00	10	Idco H525D	7		Drilling
Saipem/90	P	13.58	10	Idco E2100	25		Drilling
MALTA							
Saipem/Scarabeo 4	SS	18.75	10	Nat 1625	25	1300	Drilling
Santa Fe Drlg/Mariner 2	SS	16.75	5	Nat 1320UE	20	600	Stacked
NETHERLANDS							
Deutsche Tiefbohr/T-38 D	P	11.00	10	Wils 75	13/3.5"		Workover
Deutsche Tiefbohr/T-39	P	13.63	3	Sup 400UE	6/3.5"		Workover
Dixilyn-Field Drlg/DF87	JU	13.63	10	Nat 1320UE	25	300	Drilling
Foramer/Platon	JU	13.63	10	Nat 1625			Drilling
Global Marine Drlg/Glomar Adriatic III	JU	13.63	10	Nat 1625DE	25	300	Drilling
J L Offshore/Dan King	JU	13.63	10	Nat 1320UE	20	205	Drilling
Neddrill/Neddrill 3	JU	13.63	10	Emsco C3	20	210	Drilling
Neddrill/Neddrill 4	JU	13.63	10	Emsco C3	20	165	Drilling
Penrod Drlg/64	JU	13.63	10	Nat 1625DE	30	210	Drilling
Penrod Drlg/67	JU	13.63	10	Nat 1625DE	30	210	Drilling
Penrod Drlg/80	JU	13.63	10	Nat UE	30	210	Drilling
Penrod Drlg/81	JU	13.63	10	Nat 1320UE	25	210	Drilling
Reading & Bates/Ron Tappmeyer	JU	13.63	10	Olwl E3000	20	300	Drilling
Rowan Co/Rowan California	JU	13.63	10	Nat 1625UE	25	300	Drilling
Rowan Co/Rowan Halifax	JU	13.63	10	Nat 1625UE	25	300	Drilling
Transocean Drlg/Transocean 1	JU	11.00	10	Emsco A1500E	20	140	Drilling
Transocean Drlg/Transocean 4	JU	13.63	10	Nat 1320UE	25	160	Drilling
Zapata Offshore/Nordic	JU	13.63	10	Emsco C3 Type II	20	300	Drilling
NORWAY							
Dyvi Offshore AS/Dyvi Beta	JU	13.63	10	Nat 1320UE	20	350	Drilling
Dyvi Offshore AS/Dyvi Delta	SS	18.75	10	Olwl E3000	25	1500	Drilling
Global Marine Drlg/Moray Firth I	JU	13.63	15	Nat 1625DE	25	300	Drilling
Golar-Nor Offshore AS/Norjarl	SS	18.75	10	Nat 1625DE	20/5"	1000	Stacked
Golar-Nor Offshore AS/Nortrym	SS	18.75	10	Nat 1625DE	20/5"	1150	Drilling
Intl Chandlers/Sedco SPSS	SS					1500	Maintenance
Morco AS/2/4 E	P	13.63	5	Emsco C3			Maintenance
Morco AS/2/7 C	P	13.63	5	MC U1220B			Maintenance
Morco AS/7/11 COD	P	13.63	5	Idco E2100			Maintenance
Morco AS/1/6 Alpha	P	13.63	10	Nat 1320UE	20		Maintenance
Morco AS/2/4 Alpha	P	13.63	5	Emsco A1500E			Maintenance
Morco AS/2/4 Bravo	P	13.63	5	Emsco A1500E			Maintenance
Morco AS/2/4 Delta	P	13.63	5	Emsco C2			Workover
Morco AS/2/7 Alpha	P	13.63	5	Nat 110UE			Workover
Morco AS/2/7 Bravo	P	13.63	5	MC U1220EB			Drilling
Morco AS/2/4 Charlie	P	13.63	5	Olwl 940E			Maintenance
Morco AS/2/4 Foxtrott	P	13.63	10	Nat 1320UE			Maintenance
Neddrill/Neddrill Trigen	JU	13.63	15	Nat 1625DE	25	380	Drilling
Odfjell Drlg & Consulting/Deepsea Bergen	SS	18.75	10	Nat 1625DE	30	1500	Drilling
Odfjell Drlg & Consulting/Deepsea Pioneer	SS	18.75	10	Nat 1625DE	30	1500	Under Repair
Odfjell Drlg & Consulting/101	P	13.63	5	Nat 1320UE	20	475	Drilling
Ross Drlg/Ross Isle	SS	18.75	10	Olwl E3000	25	1500	Drilling
Smedvig Drlg/West Vanguard	SS	18.75	10	Emsco 3000	25	1500	Drilling
Smedvig Drlg/West Venture	SS	18.75	10	Emsco 3C	25	1200	Under Repair
Wlh Wilhelmsen/Treasure Saga	SS				25	1500	Drilling
Wlh Wilhelmsen/Treasure Scout	SS			MC U1220EB	25	1500	Drilling
Wlh Wilhelmsen/Treasure Seeker SS	SS		15	Emsco C3 Type II	25	1250	Drilling
Zapata Offshore/Whittington	SS	18.75	10	Nat 1625DE	25	1250	Drilling

EUROPE (Cont'd)

PORTUGAL

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Sedco Inc/Sedco 150	JU	13.63	5	Emsco A800RE	10	150	Stacked
Sedco Inc/Sedco 252	JU	13.63	10	Olwi E2000	20	250	Stacked

SPAIN

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atlantic Drlg/Benreoch	SS	18.75	15	Nat 1625DE	25/5"	1500	Drilling
Jebsens Drlg/Ali Baba	SS	18.75	10	Nat 1625DE	25	1000	Drilling
KCA Drlg/Polly Bristol	DS	18.75	10	Nat 1625DE	25	4500	Drilling
Ocean Drlg & Expl/Ocean Voyager	SS	13.63	5	Emsco C3 Type II	25	1200	Drilling
Ocean Drlg Serv/Sedco 601	SS	18.75	10	Emsco C2	20	1500	Drilling

UNITED KINGDOM

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atlantic Drlg/Bendoran	SS	21.25	2	Nat 1625DE	25/5"	660	Drilling
Atlantic Drlg/Benurackie	SS	21.25	2	Nat 1625DE	25/5"	660	Drilling
Atlantic Drlg/Ocean Benloyal	SS	13.63	10	Nat 1625DE	25/5"	680	Drilling
Bawden Drlg/32	P	10.00	3	Olwi 700	9		Drilling
Bawden Drlg/34	P	13.63	5	Nat 1320UE	22		Drilling
Bawden Drlg/35	P	16.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/39	P	13.63	5	Nat 1320UE	22		Drilling
Bawden Drlg/40	P	13.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/41	P	13.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/42	P	13.63	5	Nat 1320UE	22/5"		Drilling
Bawden Drlg/43							Drilling
Bawden Drlg/44							Drilling
Bawden Drlg/45							Workover
Bawden Drlg/46							Workover
British Gas Corp/Morcambe Flame	JU	13.63	5	Nat 80UE		150	Drilling
Deutsche Tiefbohr/T-20	P	13.63	10	Nat 1320UE	18	460	Workover
Deutsche Tiefbohr/T-21	P	13.63	10	Nat 1320UE	18	460	Drilling
Deutsche Tiefbohr/T-25	P	13.63	10	Nat 1320UE	18	510	Drilling
Dixilyn-Field Drlg/DF96	SS	18.75	10	Nat 1625DE	25	1200	Drilling
Dixilyn-Field Drlg/DF97	SS	18.75	10	Emsco C1112	25	1200	Drilling
Dyvi Offshore AS/Dyvi Gamma	JU	13.63	10	Nat 1320UE	20	350	Accom
Dyvi Offshore AS/Dyvi Omega	SS	18.75	10	Olwi E3000	25	1500	Drilling
Dyvi Offshore AS/Dyvi Sigma	JU	13.63	10	Nat 1320UE	20	210	Drilling
Forex Neptune and/or Affil/Drill Star	SS	18.75	15	Nat 1625DE	25	1500	Drilling
Forex Neptune and/or Affil/Pentagone 84	SS	13.63	10	G-D 3000E	25	1050	Drilling
Forex Neptune and/or Affil/Trident X	JU	21.25	2	Nat 1525DE	25	300	Drilling
Forex Neptune and/or Affil/Trident XI	JU	21.25	2	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Biscay II	SS	18.75	10	Nat 1625DE	25	600	Drilling
Houlder Marine Drlg/Bay Driller	JU	18.63	5	Nat 80UE	10	200	Accom
Houlder Marine Drlg/High Seas Driller	SS	18.75	15	Nat 1625E	25/5"	1500	Drilling
Houlder Marine Drlg/Shelf Driller	JU	13.63	10	Nat 1625E	25/5"	300	Drilling
Jebsens Drlg/Aladdin	SS	21.25	2	Olwi E3000	25	600	Drilling
Jebsens Drlg/Sinbad Saxon	SS	13.63	10	Olwi E3000	25	600	Drilling
Kingsnorth Marine/Dundee Kingsnorth	SS	18.75	10	Nat 1625DE	24		Drilling
Kingsnorth Marine/Kingsnorth UK	SS	18.75	10	Nat 1625DE	24		Drilling
KCA Drlg/51	P	13.63	5	Nat 1320UE	20		Drilling
KCA Drlg/52	P	13.63	5	Nat 1320UE	20		Standby
KCA Drlg/53	P	13.63	5	Nat 1320UE	20		Standby
Loffland Bros/43	P	13.63	10	Idco E3000	20		Drilling
Loffland Bros/81	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/82	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/83	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/84	P	13.63	5	MC U1220EB	20		Drilling
Ocean Drlg & Expl/Benloyal	SS	13.63	10	Nat 1625		1100	Drilling
Ocean Drlg & Expl/Ocean Bounty	SS	16.75	10	Emsco C3 Type II	25	1200	Drilling
Ocean Drlg & Expl/Ocean Kokuei	SS	13.63	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Ocean Liberator	SS	18.75	10	Nat 1625DE	25	1000	Drilling
Ocean Drlg & Expl/Ocean Nomad	SS	18.75	10	Nat 1625	25	1200	Drilling
Ocean Drlg & Expl/Ocean Victory	SS	13.63	10	Emsco C3 Type II	25	600	Drilling
Penrod Drlg/85	JU	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/92	JU	13.63	10	Nat 1320UE	25	220	Drilling
Reading & Bates/F G McClintock	JU	20.00	10	Olwi E3000	25	300	Drilling
Reading & Bates/M G Hulme Jr	SS	18.75	10	Nat 1625	25	1500	Drilling
Rowan Intl/Arch Rowan	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Cecil Provine	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Charles Rowan	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Gilbert Rowe	JU	13.63	10	Nat 1625	25	300	Drilling
Santa Fe Drlg/Britannia	JU	20.00	10	Nat 1320DE	20	160	Drilling
Santa Fe Drlg/82	P	20.00	5	Nat 1320UE	20		Drilling
Santa Fe Drlg/111	P	21.75	5	Olwi 3000E	20		Drilling
Santa Fe Drlg/135	SS	18.75	15	Olwi E3000	25	1500	Drilling
Santa Fe Drlg/140	SS	18.75	15	Olwi E3000	25	1500	Drilling
Sea Drlg Netherlands/Sedneth 701	SS	18.75	15	Olwi E3000	25	2000	Drilling
Sedco Inc/Sedco 472	DS	16.75	10	Olwi E3000	25	6000	Drilling
Sedco Inc/Sedco 711	SS	13.63	15	Olwi E3000	25	1500	Drilling
Sedco Inc/Sedco 714	SS	18.75	15	Olwi E3000	25	1500	Drilling
Sonat Interocean Drlg SA/Interocean II	JU	13.63	10	Emsco C2	20	307	Drilling
Sonat Offshore Drlg/Chris Chenery	SS	18.75	10	Nat 1625DE	20	600	Drilling
Southeastern Drlg Serv/Sedco 700	SS	21.25	10	Olwi E3000	25	1500	Drilling
Southeastern Drlg Serv/Sedco 703	SS	18.75	10	Olwi 3000	25	2000	Drilling
Southeastern Drlg Serv/Sedco 704	SS	18.75	10	Olwi 3000	25	1300	Under Repair
Southeastern Drlg Serv/Sedco 707	SS	21.25	2	Olwi E3000	25	2000	Drilling
Transocean Drlg/Transocean 6	JU	13.63	10	Emsco C3 Type II	20	300	Drilling
Transworld Drlg/58	SS			Emsco C3000	25	600	Production
Western Oceanic/Apollo I	JU	13.63	10	Emsco C3	20	300	Drilling
Western Oceanic/Apollo II	JU	13.58	10	Emsco C3	20	300	Drilling
Western Oceanic/Western Pacesetter I	SS	18.75		Nat 1625DE	25	600	Drilling
Western Oceanic/Western Pacesetter II	SS	18.75	10	Nat 1625DE	25	1200	Drilling
Western Oceanic/Western Pacesetter IV	SS	18.75	10	Emsco C3 Type II	25	1500	Drilling
Wihl Wilhelmsen/Treasure Hunter	T						Drilling
Wilh Wilhelmsen/Treasure Finer	T					1000	Drilling
Wilh Wilhelmsen/Treasure Supporter	T					600	Drilling
Wilh Wilhelmsen/Treasure Swan	SS					2500	Drilling

EUROPE (Cont'd)

WEST GERMANY

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Deutsche Tiefbohr/T-24	P	13.63	10	Nat 80BUE	13		Stacked
Transocean Drlg/Transocean 2	JU	13.63	10	Nat 1625DE	20	150	Stacked

MIDDLE EAST

QATAR

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Forex Neptune and/or Affil/Trident VI	JU	13.63	10	G-D 1500E	16	300	Drilling

SAUDI ARABIA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Arabian Drlg/Arabdrill 2	T			Nat 110			Drilling
Arabian Drlg/Arabdrill 8	JU	13.63	5	Nat 110UE	20	150	Drilling
Loffland Bros/Ocean Master V	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VI	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VII	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VIII	JU			MC U914EC	18	160	Drilling
Loffland Bros/Oceanmaster III	JU	13.66	3	MC U712A	14	160	Stacked
Loffland Bros/Orville Fisher	P	13.63	5	MC U914C	18	160	Stacked
Maersk Drlg/Maersk Venturer	JU	13.63	10	Olwi E2000	20	300	Drilling
Maersk Drlg/Maersk Voyager	JU	13.63	10	Olwi E2000	20	300	Drilling
Pool Arabia/142	JU	13.63	5	Nat 80B	12	150	Stacked
Pool Arabia/143	JU	10.00	5	OIME 1000	12.5	160	Stacked
Pool Arabia/144	JU	13.63	5	OIME 1000E	10	160	Stacked
Pool Arabia/145	JU	13.63	5	Idco ED1200	13	160	Drilling

UNITED ARAB EMIRATES

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atwood Oceanics Pacific/Bull Run	T	13.63	5	Nat 1320UE	20/5"	400	Drilling
Atwood Oceanics Pacific/Williamsburg	PT	13.63	5	Emsco C	20/5"	300	Stacked
Foramer/Ile de France	JU	13.63	5	Nat 1625DE	25	200	Drilling
Foramer/Ile du Levant	JU	13.63	5	Nat 1320DE	20	150	Drilling
Foramer/Tourmalines	JU	10.00	5	Nat 80B	12	100	Stacked
Forex Neptune and/or Affil/Trident III	JU	13.63	5	G-D 2100E	20	300	Drilling
Forex Neptune and/or Affil/Trident V	JU	10.00	5	Idco E900	10	150	Stacked
Japan Drlg/Hakuryu VI	JU	13.63	5	Nat 1320UE	23.5	180	Drilling
Japan Drlg/Hakuryu VII	JU	13.63	10	Nat 1320UE	23.5	186	Drilling
Japan Drlg/Hakuryu 8	JU	13.63	10	Nat 1320UE	23.5	186	Drilling
Loffland Bros/Ocean Master IV	JU	13.66	3	MC U914	18	110	Drilling
Maersk Drlg/Maersk Vanguard	JU	13.63	10	Olwi E2000	20	300	Drilling
Maersk Drlg/Maersk Victory	JU	13.63	10	Olwi E2000	20	300	Drilling
National Drlg/Al Ghallan	JU	13.63	5	Nat 1320UE	20	120	Under Repair
National Drlg/Al Ittihad	JU	13.63	10	Nat 1320UE	20	150	Drilling
National Drlg/Al Yasat	JU	13.63	5	Nat 1320UE	20	170	Drilling
National Drlg/Diyina	JU	13.63	5	Nat 1320UE	20	170	Drilling
National Drlg/Junana	JU	13.63	10	Nat 1320UE	20	140	Drilling
National Drlg/Yemillah	JU	13.63	10	Nat 1320UE	20/5"	220	Drilling
Ocean Drlg Serv/Sedco 160	JU	13.63	10	Emsco C2	25	160	Drilling
Ocean Drlg Serv/Sedneth II	JU	13.63	10	Olwi 3000E	25	200	Drilling
Ocean Drlg Serv/Sedneth 201	JU	13.63	10	Emsco C2	25	200	Drilling
Ocean Drlg Serv/Sedneth 202	JU	13.63	10	Emsco C2	25	200	Drilling
Ocean Drlg Serv/75	JU	13.63	5	Olwi 96	16	100	Drilling
Penrod Drlg/56	JU	13.63	10	Nat 1625DE	30	150	Stacked
Penrod Drlg/57	JU	13.63	10	Nat 1625DE	30	150	Stacked
Santa Fe Drlg/103	JU	20.00	5	Emsco C2	20	250	Drilling
Sedco Inc/Sedco 160	JU				20	160	Drilling
Sonat Offshore Drlg/Enterprise	JU	18.63	2	Nat 130		120	Maintenance
Sonat Offshore Drlg/Hustler	JU	12.00	5	Emsco A550	10	90	Drilling
Sonat Offshore Drlg/Jubilee	JU	13.63	5	Emsco A1500E	20	225	Stacked
Sonat Offshore Drlg/North Star	JU	13.63	5	Nat 1320DE	20	200	Stacked
Sonat Offshore Drlg/Offshore Antares	JU	13.38	5	Nat 130	15	115	Drilling
Sonat Offshore Drlg/Offshore Bahram	JU	13.63	5	Idco ED1200	20	200	Stacked
Sonat Offshore Drlg/Offshore Jupiter	JU	13.63	5	Emsco C1 Type II	16	130	Drilling
Transocean Drlg/Transocean 5	JU	13.63	10	Nat 1625	25	300	Drilling
Transworld Drlg/63	JU	13.63	5	Emsco C3 Type II	25	250	Stacked
Western Oceanic/Apollo III	JU	13.63	10	Emsco C3II	20	300	Drilling
Western Oceanic/Apollo IV	JU	13.63	10	Emsco C350	20	400	Drilling
Zapata Offshore/Bonito II	JU	13.63	10	Nat 1625	25	300	Drilling
Zapata Offshore/Chaparral	JU	13.63	10	Olwi 3000E	25	240	Drilling
Zapata Offshore/Heron	JU	13.63	10	Nat 1625DE	25	300	Production
Zapata Offshore/Topper II	JU	13.63	5	Nat 110UE	16.5	115	Drilling
Zapata Offshore/33	JU	13.63	10	Nat 1320	20	250	Drilling

SOUTH AMERICA

ARGENTINA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Reading & Bates/George H Galloway	JU	13.63	10	Nat 1625DE	25	300	Under Construction
Rio Colorado S A/Rio Colorado I	JU	13.63	5	Nat 1320UE	20	300	Stacked

BRAZIL

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Dolphin Titan Intl/141	P	13.63	5	U1220EB	25	300	Drilling
Dolphin Titan Intl/142	PT	13.63	10	Emsco A1500	20	250	Stacked
JFP Well Serv/JFP Seven	JU	13.63	1	Olwi E2000	25/5"	300	Drilling
Keydril/Key West	JU	13.63	10	Emsco C3 Type 2	30	350	Drilling
Maersk Drlg/Maersk Pioneer	SS	18.75	10	Emsco C2 Type II	20	600	Drilling
Marlin Drlg/Marlin 14	JU	13.63	1	Nat 1625DE	25	150	Drilling
Montreal Engenharia/Montreal III	JU	13.38	10	Nat 1320UE	21	250	Drilling
Montreal Engenharia/Montreal IV	JU	13.38	10	Nat 1625DE	25	300	Drilling
Ocean Drlg & Expl/Ocean Cyclone	DS	16.75	5	Nat 1625	25	600	Drilling
Ocean Drlg & Expl/Ocean Zephyr	SS	21.25	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Zephyr II	SS	21.25	10	Nat 1623	25	600	Drilling

SOUTH AMERICA (Cont'd)

BRAZIL (Cont'd)

ODEBRECHT PERFURACOES LTDA
Rua da Glória, 10° andar–Glória
CEP 20241–Rio de Janeiro, RJ BRASIL
Telex (021) 33197 ODEI-BR
Telephone (021) 221-0860

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Odebrecht Perfuracoes/Itapos	T					25	Stacked
Odebrecht Perfuracoes/Norbe I	JU	13.63	10	Nat 1320UE	25	300	Drilling
Odebrecht Perfuracoes/Piata	T					25	Drilling
Penrod Drlg/62	JU	13.63	10	Nat 1625DE	30	330	Production
Penrod Drlg/71	SS	13.63	10	Nat 1625	30	1000	Production
Sedco Inc/Sedco 135F	SS	13.63	10	Olwl E3000	25	600	Production
Sedco Inc/Staflo	SS	13.63	5	Nat 1625DE	20	600	Production
Sedco Intl SA/Sedco 135D	SS	16.75	5	Olwl 3000E	25	800	Production
Sonat Interocean Drlg SA/Interocean Discoverer	DS	18.75	10	Emsco C2 Type II	20	1500	Drilling
Sonat Offshore Drlg/Orion	JU	13.63	10	Nat 1320DE	20	275	Production
Transworld Drlg/61	SS	13.63	10	Emsco A1500E	20	600	Production

TRIANGLE DRILLING LTD.
Grand Cayman, BWI
Mailing Address:
Rua da Glória, 10° andar–Glória
CEP 20241–Rio de Janeiro, RJ BRASIL
Telex (021) 33197 ODEI-BR

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Triangle Drlg/Norbe II	JU	13.63	10	Olwl 3000E	25	300	Drilling
Triangle Drlg/Norbe III	JU	13.63	10	Nat 1625UE	25	290	Under Repair
CHILE							
Diamond M/Magallanes	JU	13.63	5	Olwl E2000	20	150	Drilling
Diamond M/Nugget	JU	13.63	5	Olwl E3000	30	300	Drilling
TRINIDAD & TOBAGO							
Dolphin Titan Intl/130	P	13.63	10	G-D 2100E	25		Drilling
Pool Santana/418	P	10.00	5	OIME	6		Drilling
Santa Fe Drlg/Bluewater No 3	SS	16.75	10	Nat 1625DE	25	600	Stacked
Skinner Marine/Skinmar I	P	13.63	10	Olwl E2000	20	185	Stacked
Skinner Marine/Skinmar IV	P	13.63	5	Olwl 840E	16	185	Stacked
Skinner Marine/Skinmar V	P	13.63	5	Olwl 760E	12		Stacked
Skinner Marine/Skinmar VI	P	13.63	5	Olwl 760E	12	185	Drilling
Skinner Marine/Skinmar VII	P	13.63	5	Olwl 840E	16	88	Drilling
Skinner Marine/7		7.06	3	Idco H20	3.5		Stacked
Skinner Marine/14		7.06	3	Idco H25	4		Stacked
Tropic Shipping Ent/DS Tainaron	DS	18.75	10	Nat 1320UE	30	1000	Stacked
Well Services/6	P	13.63	6	Nat 80B	12		Stacked
Well Services/7	P	13.63	6	S/B 4210	8		Stacked
VENEZUELA							
Loffland Bros/R-71	B			Idco H25			Drilling
Loffland Bros/V-101	B	6.00	5	Idco 711	10		Stacked
Loffland Bros/V-105	B	10.00	5	MC U914B	18		Drilling
Loffland Bros/V-114	B	10.00	5	MC U914C	18		Stacked
Santa Fe Drlg/Orinoco I	B	21.25	10	Olwl E2000	20	20	Stacked
Santa Fe Drlg/Reina Del Lago	B	12.00	3	Nat 80E	14	100	Drilling
Santa Fe Drlg/Rey Del Lago	B	12.00	3	Nat 80E	14	100	Drilling

UNITED STATES

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
ALABAMA-UNDESIGNATED							
Atwood Oceanics Pacific/Vicksburg	JU	13.63	10	Emsco C2	20/5"	300	Drilling
Diamond M/Century	SS	18.75	10	Olwl E3000	30	600	Under Repair
Global Marine Drlg/Glomar High Island IV	JU	13.63	10	Nat 1320UE	20	250	Drilling
Sedco Underseas Drlg/Sedco 471	DS	-16.75	10	Olwl E3000	25	6000	Stacked
ALABAMA-MOBILE BAY							
Chiles Drlg/Seabee	JU	13.63	10	Nat 1625DE	25	250	Drilling
Penrod Drlg/94	JU	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/202	S	13.63	10	Nat 1320UE	25		Drilling
Penrod Drlg/203	S	13.63	10	Nat 1320UE	25		Drilling
Temple Drlg/Tejas	B	13.63	10	Idco E3000	30	18	Drilling
ALASKA-UNDESIGNATED							
Parker Drlg/217							
Sedco Inc/708	SS	18.75	10	Olwl E3000	25	1200	Drilling
Sedco Inc/712	SS	18.75	10	Olwl E3000	25	1500	Drilling
Sedco Maritime/Sedco 708	SS	18.75	10	Olwl E3000	25	2000	Drilling
ALASKA-BIRCH							
Keydril/Key Hawaii	JU	13.63	10	Nat 1625DE	25	300	Drilling

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½ - in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
ALASKA-NORTON SOUND							
Rowan Co/Rowan Middletown	JU	13.63	10	Nat 1625		300	Drilling
CALIFORNIA-UNDESIGNATED							
Diamond M/Eagle	SS	18.75	10	Olwl E3000	30	2000	Drilling
Diamond M/Falcon	SS	18.75	10	Olwl E3000	30	2000	Drilling
Diamond M/General	SS	18.75	10	Olwl E3000	30	1200	Drilling
Fluor Drlg Serv/XI	P	11.00	5	Nat 110UE	16		Workover
Global Marine Drlg/Glomar Atlantic	DS	18.75	10	Nat 1625DE	25	2000	Drilling
Global Marine Drlg/Glomar Pacific	DS	16.75	10	Nat 1625DE	25	2000	Drilling
Global Marine Drlg/Glomar Platform I	P	13.63	5	Nat 110UE	16		Drilling
Global Marine Drlg/Glomar Platform II	P	13.63	5	Nat 110UE	16		Drilling
Keydril/Key Singapore	JU	13.63	10	Nat 1625DE	25	300	Drilling
Penrod Drlg/96	JU	13.63	10	Nat 1320UE	25		Drilling
Pool Offshore/420	P	13.63	5	OIME 750	8		Stacked
Pool Offshore/421	P	13.63	5	OIME 750	12		Stacked
Pool Offshore/422	P	13.63	5	OIME 750	8		Stacked
CALIFORNIA-SAN PEDRO							
Rowan Co/Rowan-Alaska	JU	13.63	10	Nat 1625DE	30	350	Stacked
CALIFORNIA-SANTA BARBARA							
JFP Well Serv/JFP Three	JU	13.63	10	Olwl E2000	25	300	Drilling
Ocean Drlg & Expl/Ocean Odyssey	SS	18.75	15	Emsco C3		1500	Drilling
CALIFORNIA-SANTA BARBARA CHNL							
Pool Offshore/426	P	13.63	5	OIME 750	10		Drilling
Pool Offshore/428	P	13.63	5	Idco 2000	20		Drilling
Pool Offshore/429	P	20.00	3	Idco E2100	16		Drilling
Pool Offshore/430	P	13.63	5	OIME 2000	16		Drilling
CALIFORNIA-VENTURA							
Challenger Drlg/#30 EOS				Nat 1320DE	22		

Drawworks Manufacturers Abbreviations

Bethlehem Supply Co.	Beth
Bucyrus-Erie Co.	B-E
Cabot Corp Machinery Div.	Cbot
Cardwell Mfg. Co.	Crdw
Challenger	Chal
Continental Emsco	Emsco
Cooper Mfg. Corp.	Coop
DeMag Mfg. Co.	DeMg
Ellis-Williams	E-W
Ewbank Mfg. Div. Inc.	Ewb
George E. Failing Co.	Fail
Foramines	Fora
Gardner-Denver	G-D
Hacker Machine & Supply Co.	Hack
Haniel & Lueg	H-L
Hooper Machine Works Inc.	Hoop
Houston Systems	HS
Howard-Turner Machine Works	HT
Ideco Inc.	Idco
Ingersoll-Rand Co.	I-R
Joy Mfg. Co.	Joy
Justiss-Mears Oil Co.	J-M
Lee, Harold Engineering	Lee
Mayhew Supply Co Inc.	May
Mid-Continent Supply	MC
National Supply Co.	Nat
OIME	OIME
Oilwell Div. (U.S. Steel)	Olwl
OPI Pump Div.	OPI
Quincy Mfg.	Quin
Salzgitter Maschinen Mfg. Co.	Salt
Skytop/Brewster	S/B
Spencer-Harris Machine & Tool Co.	S-H
Superior	Sup
Tri Service Mfg. Co.	TSM
Wagner-Morehouse Inc.	W-M
Walker-Neer Mfg. Co. Inc.	W-N
Weiss Corp.	Weis
Wheland Co.	Whln
Wichtex Machinery Co. Inc.	Wich
Wilson Mfg. Co. Inc.	Wils
Worth Co.	Worth

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
LOUISIANA-UNDESIGNATED							
Atlantic Pacific Marine/Gulf Commander	JU	13.63	5	Emsco A800WE	14	100	Support
Broughton Offshore Drlg/Broughton II	JU	13.63	10	Olwl E3000	30	105	Drilling
CRC Mallard/33		6.00			8		Stacked
CRC Mallard/34		6.00			10		Stacked
CRC Mallard/43	P	10.00		Wils 65	14		Stacked
Diamond M/Don E McMahon	JU	13.63	10	Olwl E2000	25	100	Drilling
Diamond M/Gem	JU	13.63	10	Olwl E3000	30	300	Drilling
Diamond M/Hunter	SS	18.75	10	Olwl E3000	30	1500	Drilling
Diamond M/New Era	SS	18.75	10	Olwl E3000	30	1200	Drilling
Diamond M/16	B	13.63	10	Idco E2500	25	12	Drilling
Diamond M/44	B	13.63	5	Olwl E3000	25	18	Drilling
Diamond M/45	B	13.63	10	Olwl E3000	25	18	Drilling
Diamond M/46	B	13.63	10	Olwl E3000	30	20	Drilling
Diamond M/47	B	13.63	10	Olwl E3000	30	20	Drilling
Diamond M/99	JU	13.63	10	Olwl E3000	30	300	Drilling
Dolphin Titan Intl/102	JU	6.00	5	Idco H35D	15	70	Workover
Dolphin Titan Intl/103	JU	10.00	5	Idco H35D	15	70	Workover
Dolphin Titan Intl/105	JU	10.00	10	Nat 610	20	100	Workover
Dolphin Titan Intl/106	JU	10.00	10	Nat 610	20	100	Stacked
Dolphin Titan Intl/128	P	13.63	10	Emsco C3 Type II	25		Drilling
Dolphin Titan Intl/129	P	13.63	10	Emsco C3 Type II	25		Drilling
Forex Neptune and/or Affil/Pentagone 82	SS	13.63	10	Emsco C3UE	25	1050	Stacked
Global Marine Drlg/Glomar Coral Sea	DS	18.75	10	Nat 1625DE	25	1500	Drilling
Global Marine Drlg/Glomar High Island I	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar High Island IX	JU	13.63	10	Nat 1320	20	250	Drilling
Global Marine Drlg/Glomar High Island VI	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar High Island VII	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar Main Pass II	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Main Pass IV	JU	13.63	10	Nat 1625DE	25	300	Drilling
Helmerich & Payne Intl Drlg/90	P	13.63	5	Olwl E2000	20		Drilling
Helmerich & Payne Intl Drlg/91	P	13.63	5	Olwl 2000	20		Drilling
Helmerich & Payne Intl Drlg/100	P	13.63	10	Olwl E3000	30		Drilling
Houston Offshore Intl/Sabine III	JU	13.63	10	Nat 1320UE	20	200	Standby
Marine Drlg/J Storm I	JU	13.63	10	Nat 130	20	225	Drilling
Marine Drlg/J Storm IV	JU	13.63	10	Nat 1625M	25	250	Drilling
Marine Drlg/J Storm VII	JU	13.63	10	Nat 1625M	25	377	Drilling
Marine Drlg/J Storm XI	JU	13.63	10	Nat 1320	20	200	Drilling
Marine Drlg/J Storm XVII	JU	13.63	10	Nat 1320M	20	250	Drilling
Marlin Drlg/1	PT	13.63	5	Nat 1320DE	20		Stacked
Marlin Drlg/2	P	13.63	5	Nat 1320DE	20		Stacked
Marlin Drlg/9	P	11.00	10	Nat 610E	10		Stacked
Noble Drlg/PB-2	B			Olwl E3000	25		Stacked
Noble Drlg/24	P	13.63	10	Nat 1625DE	25		Stacked
Noble Drlg/27	P	13.63	10	G-D 1100E	18		Stacked
Noble Drlg/30	P	13.63	10	G-D 1500E	20		Stacked
Noble Drlg/31	P			Olwl E2000	20		Stacked
Nordrill Intl/Gulfdrill	JU	13.63	10	Emsco C3	25	150	Drilling
Nordrill Intl/Oiler	JU	13.63	10	Emsco C2	25	200	Drilling
Nordrill Intl/Steeler	JU	13.63	10	Emsco C3	25	200	Drilling
Ocean Drlg & Expl/Ocean Ruler	JU			Nat 1625	25	250	Drilling
Penrod Drlg/82	JU	13.63	10	Nat 1320DE	25	250	Drilling
Pool Offshore/6	P	10.00	5	Nat T45	7		Stacked
Pool Offshore/10	P	13.63	5	OIME 750	8		Stacked
Pool Offshore/11	P	13.63	5	Nat 110H	16		Stacked
Pool Offshore/14	P			Nat T45	6		Stacked
Pool Offshore/17	P	13.63	5	OIME 1500	16		Stacked
Pool Offshore/23	P	10.00	5	Nat T45	7		Stacked
Pool Offshore/55	JU	13.63	5	Idco E90	12	90	Stacked
Pool Offshore/136	P	13.63	5	Nat 110	16		Stacked
Pool Offshore/142	P			Wils 75-750	10		Stacked
Pool Offshore/453	P	13.63	5	OIME 1500	16		Stacked
Pool Offshore/454	P	13.63	10	OIME 1500	16		Stacked
Pool Offshore/455	P	13.63	5	OIME 1500	16		
Pool Offshore/456	P	13.63	5	OIME 1500	16		Stacked
Pool Offshore Serv/11	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/16	P	2.50	5	Wils Super			Stacked
Pool Offshore Serv/20	B	2.50	5	Wils Super 38		10	Stacked
Pool Offshore Serv/40	P	4.16	10	Hydra LHD135T			Stacked
Pool Offshore Serv/41	P	4.16	10	Hydra LHD135T			Stacked
Quarles Drlg/17	B	11.00	10	Nat 160E	25	20	Stacked
Quarles Drlg/18	B	11.00	10	G-D 800E	14	10	Stacked
Quarles Drlg/21	B	13.63	10	Olwl 940E	20	30	Stacked
Quarles Drlg/22	B	11.00	10	Olwl E3000	30	23	Stacked
Quarles Drlg/23	B	13.63	10	Olwl E3000	30	28	Stacked
Reading & Bates/C E Thornton	JU	13.63	10	Olwl E3000	25	300	Drilling
Rowan Intl/4	B	13.63	10	Nat 1625DE	30	22	Stacked
Sanders Drlg/1	B	11	5	Emsco A800	16	12	Stacked
Sanders Drlg/2	B	13.63	10	S/B N12A	25	23	Stacked
Santa Fe Drlg/Blue Water 4	SS	16.75	10	Emsco C3	25	1500	Under repair
Sedco Maritime/Sedco 702	SS	21.25	10	Olwl E3000	25	1200	Drilling
Service Equipment/11	P	11.00	5	Idco E900	14		Stacked
Sonat Offshore Drlg/Discoverer 511	DS	18.75	10	Idco E2100	20	2000	Drilling
Sonat Offshore Drlg/Discoverer 534	DS	16.75	10	Nat 1625DE	20	3000	Drilling
Sonat Offshore Drlg/Offshore Pegasus	JU	13.38	10	Nat 110	16	125	Drilling
Zapata Offshore/32	JU	13.63	10	Nat 1320	20/250		Drilling
Zapata Offshore/Endeavour	JU	13.63	10	Emsco CE3000E	20	215	Drilling
Zapata Offshore/Louisiana	S	13.63	5	Unit U1220BE	20	50	Drilling
Zapata Offshore/Saratoga (27)	SS			Olwl E3000			Drilling
Zapata Offshore/Zapata Concord	SS	18.75	10	Olwl E3000	25	2000	Drilling
Zapata Offshore/Zapata Lexington	SS	18.75	10	Olwl E3000	25	2000	Under Repair
Zapata Offshore/Zapata Yorktown	SS	18.75	10	Olwl E3000	25	2000	Drilling
Zapata Offshore/29	P	13.63	10	Olwl E2000	20		Drilling
Zapata Offshore/30	P			MC U1220EB			Drilling
LOUISIANA-AMELIA							
Salen Offshore/Salenergy III	P	13.63	10	MC U1220EB	25		Stacked
LOUISIANA-ASSUMPTION							
Cliffs Drlg/3	B	13.63	10	MC U1220EB	30		Drilling
LOUISIANA-BAY MARCHAND							
Penrod Drlg/51	S	13.63	10	Emsco A1550E	25	60	Drilling
Pool Offshore/8	P	10.00	5	Nat T45	6		Drilling
Temple Drlg/Apache	JU	13.63	10	Olwl E3000	25	55	Drilling
LOUISIANA-BELLE CHASSE							
Ocean Drlg & Expl/Ocean Tempest	DS	16.75	10	Nat 1625DE	25	600	Stacked
LOUISIANA-BRETON SOUND							
Transworld Drlg/44	S	13.63	5	Idco 1350S	18	40	Drilling
LOUISIANA-CAMERON							
Atlantic Pacific Marine/15							Drilling
Bay Drlg/St John	B	10.00	5	Nat 1625M	25	11	Drilling
CRC Mallard/1	B			Wils 90	9		Workover
CRC Mallard/3	B			Nat 55	9		Workover
CRC Mallard/15	B	10.00	5	Wils 90	12	14	Drilling
CRC Mallard/16	B	10.00	5	Wils 90	12	14	Drilling
CRC Mallard/19	B	10.00	5	Wils 90	12	14	Drilling
Glendel Drlg/Mr Glen	B	13.63	10	S/B NE12	25	12	Drilling
Magnum Marine/Mr Demp	JU	13.63	10	G-D 2100E	25	250	Stacked
Pool Offshore/51	JU	10.00	5	OIME 750	10	80	Stacked
Two R Drlg/Two R-16	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-18	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-21	B			Emsco C3	25	12	Drilling
LOUISIANA-COCODRIE							
Bay Drlg/Caillou	B	11.00	5	Emsco B3661	25	10	Stacked
LOUISIANA-EAST CAMERON							
Griffin-Alexander Drlg/IV	JU	13.63	10	MC EB 1220	25	200	Drilling
Keyes Offshore/Keyes 200	JU	13.63	10	Emsco C2	20	200	Drilling
Keyes Offshore/Keyes 50	JU	13.63	10	Emsco C1	16	150	Drilling
Marlin Drlg/10	P	11.00	10	Nat 610E	10		Drilling
Ocean Drlg & Expl/Ocean Leader	JU	13.63	5	Nat 130	25	175	Drilling
Penrod Drlg/65	JU	13.63	10	Emsco C3	30	210	Drilling
Pool Offshore/2	P	10	5	Nat T45	7		Drilling
Pool Offshore/452	P	13.63	5	OIME 1500	8		Drilling
Reading & Bates/Randolph Yost	JU	13.63	10	Olwl E3000	20	300	Drilling
Salen Offshore/Salenergy I	JU	13.63	10	MC U1220EB	20	250	Drilling
LOUISIANA-EUGENE ISLAND							
Chiles Drlg/Yucatan	JU	13.63	10	Nat 1625DE	25	300	Drilling
Dixilyn-Field Drlg/85	JU	13.63	10	Nat 1320UE	20	200	Drilling
Dual Drlg/16	P	13.58	5	Nat 1320UE	25		Drilling
Griffin-Alexander Drlg/III	JU	13.63	10	MC EB1200	25	250	
Nicklos Drlg/82	P			Olwl E2000	20		Drilling
Ocean Drlg & Expl/Ocean Driller	SS	13.63	10	Emsco C2	25	600	Drilling
Penrod Drlg/67	JU	13.63	10	Nat 1320UE	25		Drilling
Pool Offshore/50	JU	10.00	5	OIME 750	10	80	Drilling
Pool Offshore/54	JU	13.63	5	Idco E90	12	90	Drilling
Pool Offshore/80	P	13.63	5	Idco 2000	20		Drilling
Reading & Bates/63	P	13.63	10	Olwl E3000	25		Drilling
Transworld Drlg/70	S	13.63	10	Olwl E3000	25	100	Drilling
LOUISIANA-EWING BANK							
Ocean Drlg & Expl/Ocean Endeavour	SS	18.75	10	Emsco C3 Type II	25	1000	Drilling
LOUISIANA-GRAND ISLE							
Chiles Drlg/Gulfwind	JU	13.63	10	Nat 1320UE	18	150	Drilling
Chiles Drlg/I	P	13.63	10	Nat 1320UE	20		Drilling
CRC Mallard/45	P	10.00		Wils 65	8		Drilling
Dual Drlg/29	P	13.63	10	Emsco C3	30		Drilling
Keyes Offshore/Keyes 250	JU	13.63	10	Emsco C2	20	250	Drilling
Pool Offshore Serv/4	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/8	P	2.50	5	Wils Super 38			Workover
Pool Offshore Serv/12	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/15	P	2.50	5	Wils Super 38			Workover
Rowan Co/Rowan-Texas	JU	13.63	10	Nat 1320UE	25	225	Drilling
LOUISIANA-GREEN CANYON							
Ocean Drlg & Expl/Ben Ocean Lancer	DS	16.75	10	G-D 3000E	25	3000	Drilling
Ocean Drlg & Expl/Ocean Rover	SS	13.65	10	Emsco C3 Type II	25	600	Drilling
Penrod Drlg/72	SS	13.63	10	Nat 1625DE	30	300	Drilling
Penrod Drlg/73	SS			Nat 1625DE	30		Drilling
Penrod Drlg/74	SS	13.63	10	Nat 1625DE	30	1700	Drilling
Penrod Drlg/75	SS	13.63	10	Nat 1625DE	30	2000	Drilling
Penrod Drlg/78	S	13.63	10	Nat 1625E	25		Drilling
Sedco Inc/702	SS	16.75	10	Olwl E3000	25	1500	Drilling
LOUISIANA-HARVEY							
Mayronne/M-142	P	13.63	5	S/B N12	18		Stacked
LOUISIANA-HIGH ISLAND							
Santa Fe Drlg/Blue Water 2	S	13.63	10	Nat 1625DE	25	55	Drilling

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UNITED STATES (Cont'd)

LOUISIANA-IBERIA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Bay Drlg/Matagorda Bay	B	10.00	5	Emsco BL3881	25	14	Stacked
Cliffs Drlg/4	B	13.63	10	MC U1220EB	30		Drilling
CRC Mallard/7	B			Nat 55	11		Workover
Goldrus Marine Drlg/2	B	13.63	10	Olwl 3000E	30	20	Stacked
Goldrus Marine Drlg/3	B	13.63	10	Olwl 3000E	30	20	Stacked
Goldrus Marine Drlg/4	B	13.63	10	Olwl 3000E	30	20	Stacked
Loffland Bros/153	B	10.00	5	Beth 1013	15		Stacked
Loffland Bros/154	B	10.00	5	MC U1220	22		Stacked
Penrod Drlg/40	B	13.63	10	Nat 1625DE	30	20	Stacked
Two R Drlg/Two R-14	B			Wils 250	25	20	Drilling

LOUISIANA-JEFFERSON

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Bay Drlg/Gibbens	B	10.00	5	Nat 130	18	10	Drilling

LOUISIANA-LAFOURCHE

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Blocker Drlg & Marine/East Bay	B						Stacked
Blocker Drlg & Marine/Grand Bay	B						Stacked
Blocker Drlg & Marine/Terrebonne Bay	B	13.63	5	OIME SL9E	20	12	Stacked
Blocker Drlg & Marine/West Bay	B						Stacked
Booker Drlg/11	P	10.00	5	G-D 3000			Stacked
Booker Drlg/15	P	10.00	5	G-D 3000			Stacked
Booker Drlg/50	P	10.00	5	G-D 500			Stacked
Booker Drlg/60	P	10.00	5	G-D 500			Stacked
Booker Drlg/70	P	10.00	5	G-D 500			Stacked
Booker Drlg/90	P	6.00	5	G-D 500			Stacked
Booker Drlg/100	P	6.00	5	G-D 500			Stacked
Booker Drlg/110	P	10.00	5	G-D 500			Stacked
Booker Drlg/120	P	10.00	5	G-D 500			Stacked
Booker Drlg/150	P	10.00	5	G-D 500			Stacked
Glendel Drlg/Mr A W	B	13.63	10	S/B NE12	25	12	Stacked
Glendel Drlg/Mr Beldon	B	13.63	10	S/B NE12	25	20	Drilling
Goldrus Marine Drlg/1	B	13.63	10	Olwl 3000E	30	20	Stacked
Houtech Energy/III	JU	11.25	10	G-D 700M	10	73	Drilling
Mayronne/M-162	P	13.63	10	Nat 1320UE	20		Stacked
Mayronne/M-172	P	13.63	10	Nat 1320UE	20		Stacked
Noble Drlg/Barge 4	B			Nat 160S	25		Drilling
Pool Offshore Serv/5	B	6.00	5	Wils Mogul 42		10	Workover
Pool Offshore Serv/18	B	7.06	5	Wils Mogul 42	8	12	Workover
Rebstock Drlg/Rig No 5	B	13.63	5	Nat 1320	20	24	Stacked
Rebstock Drlg/2	B	10.00	5	Nat N80	14	12	Stacked
Rebstock Drlg/3	B	10.00	5	G-D 800	13	12	Stacked
Rebstock Drlg/4	B	13.63	5	Olwl 880	18	12	Stacked

UNITED STATES (Cont'd)

LOUISIANA-MAIN PASS

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Booker Drlg/Rig No 170	P	10.00	5	G-D 500			Workover
Booker Drlg/30	P	6.00	5	G-D 500			Workover
Booker Drlg/130	P	10.00	5	G-D 500			Workover
Booker Drlg/140	P	6.00	5	G-D 500			Workover
Booker Drlg/951	P	10.00	5	G-D 1000	8		Drilling
Chiles Drlg/II	P	13.63	10	Nat 1320UE	20		Drilling
Dixilyn-Field Drlg/80	JU	13.63	10	Nat 1320DE	20	370	Drilling
Huthnance Drlg/Vanguard II	JU	13.63	10	Emsco U1220EB	25	300	Drilling
Huthnance Drlg/12	P	13.63	10	MC U1220	25		Drilling
Noble Drlg/26	P	13.63	10	Nat 1320UE	20		Drilling
Ocean Drlg & Expl/Ocean King	JU	13.63	10	Nat 1625	25	300	Drilling
Penrod Drlg/61	JU	13.63	10	Emsco C3	30	340	Drilling
Service Equipment/14	P	13.63	5	Idco E900	14		Drilling
Teledyne Movible Offshore/2	S	13.63	5	Nat 1625DE	25	70	Drilling
Transworld Drlg/47	S	13.63	10	Emsco A1500E	20	70	Drilling
Transworld Drlg/71	JU	13.63	10	Emsco C3 Type II	25	250	Drilling

LOUISIANA-MISSISSIPPI CANYON

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Dual Drlg/25	P	13.63	10	Olwl E3000	25		Drilling
Western Oceanic/Alaskan Star	SS	16.75	10	Emsco C3	25	1500	Drilling
Western Oceanic/Western Pacesetter III	SS	18.75	10	Emsco C311	25	1200	Drilling

LOUISIANA-MORGAN CITY

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Fluor Drlg Serv/63	P	13.63	10	Nat 1320UE	20		Stacked

LOUISIANA-NEW IBERIA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Cliffs Drlg/5	B	13.63	10	Idco E3000	30	24	Stacked

LOUISIANA-PLAQUEMINES

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atlantic Pacific Marine/7	B	13.63	10	Olwl 2000	25	20	Drilling
Atlantic Pacific Marine/8	B	13.63	10	Olwl 2000	25	20	Drilling
Atlantic Pacific Marine/10	B	13.63	10	Olwl E2000	25	20	Drilling
Atlantic Pacific Marine/16							Drilling
Atlantic Pacific Marine/17							Drilling
Bay Drlg/Hebert	B	10.00	5	Emsco BL1013	16.5	10	Stacked
CRC Mallard/11	B	6.00	5	Wils 90	12	14	Workover
Glendel Drlg/Mr Carl	B	13.63	10	S/B NE12	25	12	En Route
Glendel Drlg/Mr George	B	13.63	10	G-D 3000	30	25	Stacked
Noble Drlg/Barge 3	B			Nat 1320UE	20		Drilling
Pool Offshore Serv/14	B	6.00		Wils Super 38			Workover

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UNITED STATES (Cont'd)

LOUISIANA-PLAQUEMINES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Shank Drlg/4	B			Emsco C3	30	12	Drilling
Two R Drlg/Two R-12	B			Nat 1625UE	25	12	Drilling

LOUISIANA-SABINE CHANNEL

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Santa Fe Drlg/Choctaw I	SS	18.75	10	Nat 1320UE	20	800	Stacked
Santa Fe Drlg/Mariner 3	SS	16.75	10	Olwl E2000	20	600	Stacked

LOUISIANA-SABINE PASS

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Houston Offshore Intl/Sabine I	JU	13.63	10	Nat 1320UE	20	200	Drilling
Ocean Drlg & Expl/Ocean Queen	SS	13.63	5	Emsco A1500	25	1200	Stacked
Ocean Drlg & Expl/St Louis	S	13.63	5	Emsco EDES	25	30	Available

LOUISIANA-SHIP SHOAL

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Booker Drlg/14	P	10.00	5	G-D 3000			Workover
Booker Drlg/80	P	10.00	5	G-D 500			Workover
Marlin Drlg/6	JU	13.63	10	Nat 1625DE	30	300	Drilling
Noble Drlg/S-55	SS	13.63	10	Nat 1625DE	25	80	Drilling
Ocean Drlg & Expl/Mr Charlie	S	13.63	5	Emsco EDES	25	40	Drilling
Ocean Drlg & Expl/Ocean Chief	JU	13.63	5	Emsco A1500	25	224	Drilling
Ocean Drlg & Expl/Ocean Explorer	SS	13.63	5	Emsco EDES	25	600	Drilling
Ocean Drlg & Expl/Ocean Pride	JU	13.63	5	Nat 110	25	152	Drilling
Penrod Drlg/97	JU	13.63	10	Nat 1320DE	250	250	Drilling
Pool Offshore/3	P			Nat T45	6		Drilling
Rowan Co/Rowan Fort Worth	JU	13.63	10	Nat 1625	25	300	Drilling
Service Equipment/21	P	13.63	10	Idco 2100	25		Drilling
Transworld Drlg/54	S	13.63	5	Emsco B3661	20	175	Drilling
Transworld Drlg/72	S	13.63	10	Olwl E3000	25	100	Drilling

LOUISIANA-SOUTH MARSH ISLAND

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
CRC Mallard/44	P	10.00		Wils 65	14		
Griffin-Alexander Drlg/II	JU	13.63	10	MC EB1200	25	200	
Keyes Offshore/Keyes 300	JU	13.63	10	Emsco C2	20	250	Drilling
Ocean Drlg & Expl/John Hayward	S	10.00	5	Emsco EDA	25	30	Drilling
Ocean Drlg & Expl/Ocean Scout	SS	13.63	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Ocean Star	JU	13.63	5	Nat 1320UE	25	173	Drilling
Pool Offshore/5	P	10.00	5	Nat T45	6		Drilling
Pool Offshore/140	P						Drilling
Pool Offshore/423	P	13.63	5	OIME 1000E	12		Drilling
Transworld Drlg/65	S	13.63	10	Emsco C3 Type II	25	70	Drilling

LOUISIANA-SOUTH PASS

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Bokenkamp Drlg/2	P	13.63	10	Olwl E2000	25		
Booker Drlg/952	P	13.63	5	G-D 1000	8		Drilling
Dual Drlg/12	P	13.58	10	Emsco C2	25		Drilling
Dual Drlg/24	P	13.63	10	Olwl E2000	25		Drilling
Dual Drlg/38	P	13.63	10	Olwl E3000	30		Drilling
Helmerich & Payne Intl Drlg/101	P	13.63	5	Nat 110UE	20		Drilling
Huthnance Drlg/14	P	13.63	10	MC U1220	25		Completion
Keydril/Aleutian Key	SS	18.75	10	Olwl E3000	30	3000	Drilling
Marlin Drlg/7	SS	13.63	10	Nat 1625DE	30	1000	Drilling
Pool Offshore/9	P	13.63	5	Nat T45	6		Drilling

LOUISIANA-SOUTH PELTO

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Ocean Drlg & Expl/Ocean Viking	SS	13.63	10	Emsco A1500	25	600	Drilling

LOUISIANA-SOUTH TIMBALIER

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Marlin Drlg/4	JU	13.63	10	Nat 1625DE	25	150	Drilling
Noble Drlg/Sam Noble	JU			Olwl E3000	25		Drilling
Ocean Drlg & Expl/Ocean Conquest	JU	13.63	10	Emsco C2	25	250	Drilling
Ocean Drlg & Expl/Ocean Patriot	JU	13.63	10	Nat 1320ME	25	152	Drilling
Ocean Drlg & Expl/Odeco Seven	S	13.63	5	Idco E2500	25	35	Stacked
Penrod Drlg/36	P	13.63	10	Nat 1320UE	30	300	Drilling
Penrod Drlg/59	JU	13.63	10	Nat 1625DE	30	220	Drilling
Penrod Drlg/88	JU	13.63	10	Nat 1320UE	25		Drilling
Penrod Drlg/90	JU	13.63	10	Nat 1320UE	25		Drilling
Service Equipment/3	P	10.00	5	Cabot 1287	9		Workover
Service Equipment/5	P	10.00	5	OIME 750	11		Workover
Service Equipment/7	P	10.00	5	OIME 750	11		Workover
Service Equipment/12	P	11.00	5	Idco E800	14		Drilling

LOUISIANA-ST BERNARD

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
CRC Mallard/14	B	6.00	5	Wils 90	12	14	Workover
CRC Mallard/17	B	10.00	5	Wils 90	14	14	Drilling
CRC Mallard/20	B	10.00	5	Wils 90	12	14	Drilling
CRC Mallardl/18	B	10.00	5	Wils 90	12	14	Drilling
Temple Drlg/Tonkawa	B	13.63	10	Idco E3000	30	20	Drilling
Two R Drlg/Two R-17	B			Emsco CEC3	25	22	Drilling

LOUISIANA-ST MARTIN

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
CRC Mallard/12	B	10.00	5	Wils 90	12	14	Workover
Two R Drlg/Two R-15	B			Emsco C3	25	10	Drilling

LOUISIANA-ST MARY

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Atlantic Pacific Marine/9	B	13.63	10	Olwl E2000	25	20	Drilling
Atlantic Pacific Marine/11	B	13.63	10	Olwl E2000	25	13	Drilling
Bay Drlg/Mr Harvy	B	10.00	5	Nat 1625M	25	12	Drilling
Cactus Intl/101	P	13.63	5	Emsco Electrohoist II	25		
Cactus Intl/102	P	13.63	5	Emsco C2	25		
Cactus Intl/103	P	13.63	5	Olwl E2000	25		
Cactus Intl/104	P	13.63	5	Emsco Electrohoist II	25		
Cactus Intl/162	P	13.63	5	Emsco A1500	25		
Cactus Intl/163	P	13.63	5	Emsco Electrohoist II	25		
Cactus Intl/165	P	13.63	5	Olwl E2000	25		
CRC Mallard/4	B			Nat 80	11		Workover

UNITED STATES (Cont'd)

LOUISIANA-ST MARY (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Dolphin Titan Intl/101	JU	6.00	5	Idco H35D	15	70	Stacked
Dolphin Titan Intl/104	JU	10.00	5	Idco H35D	15	70	Stacked
Dolphin Titan Intl/122	P	13.63	5	Nat 110UE	16		Stacked
Dolphin Titan Intl/123	P	13.63		Idco E1700	20		Stacked
Dolphin Titan Intl/124	P	13.63	5	MC U1220EB	20		Stacked
Dolphin Titan Intl/126	P	13.63	5	MC U1220EB	20		Stacked
Dolphin Titan Intl/127	P	13.63	10	Emsco C3 Type II	25		Stacked
Houtech Energy/II	JU	11.25	10	G-D 700M	10	73	Drilling
Penrod Drlg/31	P	13.63	10	Nat 110UE	16.5	300	Stacked
Penrod Drlg/32	P	13.63	10	Nat 1320UE	25	250	Stacked
Penrod Drlg/34	P	13.63	10	Nat 110UE	16.5	300	Stacked
Penrod Drlg/35	P	13.63	10	Nat 1320UE	16.5	300	Stacked
Penrod Drlg/37	P	13.63	10	Emsco C2	25	300	Stacked
Penrod Drlg/38	P	13.63	10	Nat 1320UE	25	300	Stacked
Shank Drlg/3	B	10.00	5	Beth B3661	25	12	Stacked

LOUISIANA-TERREBONNE

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Atlantic Pacific Marine/Ranger III	JU	10.00	5	G-D DW500R	9	70	Drilling
Atlantic Pacific Marine/Ranger IV	JU	10.00	5	Olwl 660	9	73	Drilling
Atlantic Pacific Marine/12	B	13.63	5	Olwl E2000	25	13	Drilling
Atlantic Pacific Marine/14	B	13.63	5	Olwl E2000	25	13	Drilling
Cliffs Drlg/1	B	13.63	10	MC U1220EB	30	18	Drilling
Harris Well Serv/16	B	7.16	5	MC U36A	10	12	Drilling
Houtech Energy/I	JU	11.25	10	G-D 700M	10	73	Drilling
Loffland Bros/4	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/17	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/74	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/75	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/78	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/143	B	10.00	5	MC U1220	22		Stacked
Map Drlg/1	B	7.06	5	Olwl 66	11	8	Stacked
Penrod Drlg/41	B	13.63	10	Nat 1625DE	30		Stacked
Penrod Drlg/42	B	13.63	10	Nat 1625DE	30	20	Stacked
Penrod Drlg/43	B	13.63	10	Nat 1320DE	25	12	Stacked
Penrod Drlg/44	B	13.63	10	Nat 1625DE	30	10	Stacked
Penrod Drlg/45	B	13.63	10	Nat 1625DE	30	20	Stacked
Penrod Drlg/47	B	13.63	10	Emsco A1500E	25	16	Stacked
Penrod Drlg/48	B	13.63	10	Nat 1625DE	30	20	Stacked
Penrod Drlg/49	B	13.63	10	Nat 1625DE	30	20	Stacked
Penrod Drlg/50	S	13.63	10	Emsco A1500E	25	50	Stacked
Shank Drlg/2	B	10.00	5	Wils 150-2000	18	10	En Route
Two R Drlg/Two R-1	B			Beth B3661	25	10	Stacked
Two R Drlg/Two R-19	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-20	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-22	B			Emsco C3	30	10	Drilling

LOUISIANA-VERMILION

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
CRC Mallard/5	B			Nat 80B	11		Workover
Glendel Drlg/Mr Del	B	13.63	10	S/B NE12	25	20	Stacked
Griffin-Alexander Drlg/VI	JU	13.63	10	MC EB1220	25	200	
Huthnance Drlg/Acadian Spirit	JU	13.63	10	Emsco C2	25	112	Drilling
Keyes Offshore/Keyes 303	JU	13.63	10	Emsco C3	25	300	Drilling
Noble Drlg/NN-1	JU			G-D 1500	20	12-46	Drilling
Noble Drlg/PB-3	B			Nat 1625DE	25		Drilling
Noble Drlg/26				G-D 1500E	20		Drilling
Phoenix Management/Big Foot One	JU	13.63	10	G-D 2100E	25	86	Drilling
Teledyne Movible Offshore/17	JU	13.63	10	Emsco C3 Type 2	25	250	Workover
Teledyne Movible Offshore/18	JU	13.63	10	Emsco C3 Type II	25	250	Stacked
Teledyne Movible Offshore/19	JU	13.63	10	Emsco C3 Type 2	25	250	Drilling
Teledyne Movible Offshore/20	JU	13.63	10	Emsco C3 Type 2	25	250	Stacked
Transworld Drlg/68	S	13.63	10	Emsco C3 Type II	25	100	Drilling
Two R Drlg/Two R-10	B			Nat 1320M	20	10	Drilling
Western Oceanic/Nike I	JU	13.63	10	Nat 1320	20	150	Drilling

LOUISIANA-WEST CAMERON

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Chiles Drlg/Gulfstream	JU	13.63	10	Nat 110UE	18	150	Drilling
Dixilyn-Field Drlg/83	JU	13.63	10	Nat 1320UE	20	250	Drilling
Dixilyn-Field Drlg/84	JU	13.63	10	Nat 1320UE	20	250	Drilling
Houston Offshore Intl/Sabine IV	JU	13.63	10	Nat 1320UE	20	200	Drilling
Houston Offshore Intl/Sabine V	JU	13.63	10	Nat 1320UE	20	200	Drilling
Huthnance Drlg/Charger I	JU	21.25	2	MC U1220EB	25	150	Drilling
Huthnance Drlg/Charger II	JU	13.63	10	MC U1220EB	25	150	Drilling
Keyes Offshore/Keyes 302	JU	13.63	10	Emsco C2	20	300	Drilling
Ocean Drlg & Expl/Barge A	S	14.00	5	Idco 2500	25	70	Drilling
Ocean Drlg & Expl/Gulfside	JU	13.63	10	Nat 1625DE	25	250	Drilling
Ocean Drlg & Expl/Ocean Traveler	SS	13.63	10	Nat 1625DE	25	600	Drilling
Penrod Drlg/53	JU	13.63	10	Nat 1625DE	30	300	Stacked
Penrod Drlg/54	JU	13.63	10	Nat 1625DE	30	300	Stacked
Penrod Drlg/55	JU	13.63	10	Nat 1625DE	30	150	Stacked
Penrod Drlg/84	JU	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/86	JU	13.63	10	Nat 1320UE	25	250	Drilling
Pool Offshore Serv/903	P	2.50	5	Wils Super			Drilling
Salen Offshore/Salenergy VI							Drilling
Savage Drlg/Ponca	JU	13.00	10	Nat 1320UE	25	150	Drilling
Temple Drlg/Cheyenne	JU	13.63	10	Olwl E2500	25	200	Drilling
Temple Drlg/Comanche	JU	13.63	10	Olwl E2000	25	150	Drilling
Transworld Drlg/58	JU	13.63	5	Nat 1320UE	20	125	Drilling
Transworld Drlg/69	S	13.63	10	Olwl E3000	25	100	Drilling
Western Oceanic/Western Delta	JU	13.63	5	Nat 80UE	15	173	Drilling

LOUISIANA-W COTE BLANCHE BAY

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
Bay Drlg/Terrebonne Bay	B	11.00	5	Nat 1625	25	10	Drilling

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
LOUISIANA-WEST DELTA							
Bokenkamp Drlg/4	P	13.63	10	Olwl E2000	25		
Booker Drlg/6	P	2.50	5	G-D 3000			Workover
Booker Drlg/10	P	10.00	5	G-D 3000			Workover
Booker Drlg/950	P	13.63	5	G-D 1000	10		Completion
Dixilyn-Field Drlg/76	S	13.63	10	S/B N12A	20	80	Drilling
Fluor Drlg Serv/Mr Gus II	JU	13.63	5	Natl 160E	25	150	Drilling
Fluor Drlg Serv/Mr Sam	JU	13.63	10	G-D 1500RE	25	155	Drilling
Huthnance Drlg/15	P	13.63	5	MC U1220	25		Drilling
Mayronne/M-152	P	13.63	5	S/B N20	18		Drilling
Penrod Drlg/60	JU	13.63	10	Emsco C3	30	330	Drilling
Penrod Drlg/63	JU	13.63	10	Natl 1320UE	25	250	Drilling
Phoenix Management/The Mr Ray	B	10.63	10	G-D 2100E	30	8.5	Drilling
Pool Offshore Serv/17	P	2.50	5	Wils Super 38			Workover
Service Equipment/6	P	10.00	5	OIME 750	11		Workover
Zapata Offshore/Zapata Neptune	SS	18.75	10	Natl 1625	25	1500	Drilling
MISSISSIPPI-GULFPORT							
Cliffs Drlg/6	B	13.63	10	Idco E3000	30	24	Stackd
TEXAS-UNDESIGNATED							
Bokenkamp Drlg/1	P	13.63	10	Olwl E2000	25		Stacked
Bokenkamp Drlg/3	P	13.63	10	Olwl E2000	25		Stacked
Broughton Offshore Drlg/Broughton I	JU	13.63	10	Olwl E3000	30	105	Drilling
CRC Mallard/46		13.63		Wils 65	12.5		Stacked
Diamond M/97	P	13.63	10	Olwl E2000	20		Drilling
Dolphin Titan Intl/125	P	13.63	5	Natl 1320UE	20		Drilling
Marine Drlg/J Storm III	JU	13.63	10	Natl 1625M	25	250	Drilling
Marine Drlg/J Storm IX	JU	13.63	10	Natl 1320	20	195	Drilling
Marine Drlg/J Storm VI	JU	13.63	10	Natl 1625M	25	250	Drilling
Marine Drlg/J Storm VIII	JU	13.63	10	Natl 1320	20	150	Drilling
Marine Drlg/J Storm X	JU	13.63	10	Natl 1320	20	250	Drilling
Marine Drlg/J Storm XII	JU	13.63	10	Natl 1320	20	200	Drilling
Marine Drlg/J Storm XIV	JU	13.63	10	Natl 1320	20	200	Drilling
Marine Drlg/J Storm XV	JU	13.63	10	Natl 1625M	25	250	Drilling
Marine Drlg/J Storm XVI	JU	13.63	10	Natl 1320	20	250	Drilling
Marine Drlg/J Storm XVIII	JU	13.63	10	Natl 1320M	25	250	Drilling
Nicklos Drlg/83	P			Natl 110UE	18		Stacked
Nordrill Intl/Falcon	JU	13.63	10	Emsco C2	25	200	Drilling
Nordrill Intl/Fjelldrill	JU	13.63	10	Natl 1625UE	25	250	Drilling
Pool Offshore/53	JU	10.00	5	OIME 750	12	90	Drilling
Pool Offshore Serv/22	B	11.00	5	Wils Super Giant	12	12	Drilling
Pool Offshore Serv/24	B	11.00	5	Wils Super Giant	12	12	Drilling
Quarles Drlg/20	B	11.00	10	Idco E3000	25	18	Stacked
Skinner Marine/Skinner II	P	13.63	5	Olwl E2000	20	185	Stacked
Skinner Marine/Skinner III	P	13.63	5	Olwl E2000	20	185	Stacked
Zapata Offshore/34	P			Idco E3000			Drilling
TEXAS-BRAZOS							
Fluor Drlg Serv/Mr Dave	JU	13.63	10	Natl 1320UE	20	250	Drilling
Fluor Drlg Serv/62	P	13.63	10	Natl 1320UE	20		Drilling
Noble Drlg/29	P	13.63	10	Olwl E2000	20		Drilling
Rowan Co/Rowan Odessa	JU	13.63	10	Natl 1625	25	300	Drilling
Transworld Drlg/62	JU	13.63	10	Emsco C3 Type II	25	300	Drilling
TEXAS-CALHOUN							
Dixilyn-Field Drlg/50	B	10.00	5	Natl 130	20	8	Drilling
Rio Grande Drlg/4	B	13.63	10	Natl 1320M	25	14	Drilling
TEXAS-CHAMBERS							
Cliffs Drlg/2	B	13.63	10	MC U1220EB	30		Drilling
MGF Drlg/37	B	6.00	5	G-D 500	9	10	Workover
Penrod Drlg/46	B	13.63	10	Emsco ECB	20	16	Stacked
Rio Grande Drlg/1	B	13.63	5	Natl 110M	18	14	Drilling
TEXAS-EAST BREAKS							
Marlin Drlg/5	P	13.63	10	Natl 1320DE	20		Drilling
Reading & Bates/Rig 40	P	13.63	10	Natl 1625	18		Drilling
Service Equipment/15	P	13.63	10	Idco E900	17		Drilling
TEXAS-GALVESTON							
Cliffs Drlg/Cliffs LaSalle	JU	13.63	10	Natl 1320UE	25		Drilling
Keyes Offshore/Keyes 301	JU	13.63	10	Emsco C2	20	300	Standby
MGF Drlg/31	B	10.00	5	Olwl 76	12	10	Drilling
Rowan Intl/Rowan-New Orleans	JU	13.63	5	Natl 1324UE	25	225	Drilling
Transworld Drlg/64	JU	13.63	10	Olwl E3000	25	300	Drilling
TEXAS-GARDEN BANK							
Rowan Co/Rowan Midland	SS	13.63	10	Natl 1625	25	[illegible]	Drilling
TEXAS-HIGH ISLAND							
Booker Drlg/8	P	2.50	5	G-D 3000			Workover
Booker Drlg/20	P	6.00	5	G-D 500			Workover
Booker Drlg/160	P	10.00	5	G-D 300			Workover
Cliffs Drlg/Cliffs Marquette	JU	13.63	10	Natl 1320UE	25	190	Drilling
Dixilyn-Field Drlg/77	S	13.63	10	Natl 1625DE	30	85	Drilling
Dixilyn-Field Drlg/86	JU	13.63	10	Natl 1320UE	20	200	Drilling
Fluor Drlg Serv/Mr Si	JU	13.63	10	Natl 1625DE	30	350	Drilling
Griffin-Alexander Drlg/VII	JU	13.63	10	MC EB1220	25	250	
Huthnance Drlg/11	P	13.63	5	MC U1220	25		Drilling
Loffland Bros/76	P	13.63	5	MC U1220BE	22		Drilling
Penrod Drlg/66	JU	13.63	10	Natl 1625DE	30	210	Drilling
Penrod Drlg/70	SS	13.63	10	Natl 1625DE	30		Drilling
Penrod Drlg/91	JU	13.63	10	Natl 1320UE	25		Drilling
Penrod Drlg/201	S	13.63	10	Natl 1320UE	25		Drilling
Phoenix Management/Big Foot Two	JU	10.63	10	G-D 2100E	25	85	Drilling
Phoenix Management/The Mr Ric	JU	13.63	10	G-D 2100E	20	100	Drilling
Reading & Bates/Leo M Clark	PT	13.63	10	Natl 110M	18		Drilling
Rowan Intl/Rowan-Houston		13.63	10	Natl 1325UE	25	225	Drilling
Salen Offshore/Salenergy V	JU	13.63	10	MC U1220BE	20	250	Drilling
Service Equipment/4	P	10.00	5	OIME 500	9		Workover
Service Equipment/9	P	10.00	5	OIME 750	11		Workover
Service Equipment/10	P	10.00	5	OIME 750	10		Workover
Teledyne Movible Offshore/4	P	13.63	5	Natl 110UE	16		Workover
Transworld Drlg/73	S	13.63	10	Olwl E3000	25	100	Drilling
Western Oceanic/Western Triton IV	JU	13.63	10	Emsco C2	20	250	Drilling
TEXAS-INGLESIDE							
Magnum Marine/R M Womack	JU	13.63	10	Sup 2000E	25	100	Stacked
Magnum Marine/R N Haskin	JU	13.63	10	Sup 2000E	25	100	Stacked
Marine Drlg/Stormdrill V	JU	13.63	10	Natl 130	20	115	Stacked
TEXAS-JEFFERSON							
Dixilyn-Field Drlg/51	B	10.00	5	Natl 110	18	10	Drilling
TEXAS-MATAGORDA							
Griffin-Alexander Drlg/V	JU	13.63	10	MC EB1220	25	200	
JFP Well Serv/JFP Five	JU	13.63	10	Olwl E2000	25/5"	120	Stacked
TEXAS-MATAGORDA ISLAND							
Houston Offshore Intl/Nueces I	JU	13.63	10	Natl 1320UE	16	115	Drilling
Loffland Bros/79	P	13.63	5	MC U1220BE	22		Drilling
Noble Drlg/Ed Holt	JU			Olwl E3000	25		Drilling
Ocean Drlg & Expl/Ocean Champion	JU	13.63	10	Natl 1625DE	25	250	Drilling
Penrod Drlg/30	P	13.63	10	Natl 1320UE	25	250	Drilling
Penrod Drlg/69	JU	13.63	10	Natl 1625DE	30	330	Drilling
Penrod Drlg/88	JU	13.63	10	Natl 1320UE	25	250	Drilling
Rowan Co/Rowan Paris	JU	13.63	10	Natl 1625	25	300	Drilling
Transworld Drlg/50	JU	13.63	5	Natl 55	12	70	Stacked
TEXAS-MUSTANG ISLAND							
Dual Drlg/23	P	13.63	10	Olwl E3000	25		Drilling
Houston Offshore Intl/Sabine II	JU	13.63	10	Natl 1320UE	20	200	Drilling
Huthnance Drlg/Vanguard I	JU	13.63	10	MC U1220EB	25	300	Drilling
Keydril/Key Manhattan	JU	13.63	10	Natl 1625DE	25	300	Drilling
Marlin Drlg/3	JU	13.63	10	Natl 1625DE	25	250	Drilling
Nicklos Drlg/81	P			Natl 1320UE	20		Drilling
Penrod Drlg/60	JU	13.63	10	Natl 1625DE	30	330	Drilling
Penrod Drlg/83	JU	13.63	10	Natl 1320DE	25	250	Drilling
Rowan Co/Rowan Louisiana	JU	13.63	10	Natl 1625DE		300	Drilling
Teledyne Movible Offshore/16	JU	13.63	10	Emsco C3 Type 2	25	250	Completion
Western Oceanic/Western Triton III	JU	13.63	10	Emsco C2	20	250	Drilling
TEXAS-NORTH PADRE ISLAND							
Fluor Drlg Serv/Mr Mel	JU	13.63	10	Natl C1625DE	30	350	Drilling
Rowan Intl/Rowan Anchorage	JU	13.63	5	Natl 1320UE	25	225	Drilling
VIRGINIA-UNDESIGNATED							
Sonat Offshore Drlg/Discoverer Seven Seas	DS	16.75	10	Emsco C3 Type II	25	7500	Drilling

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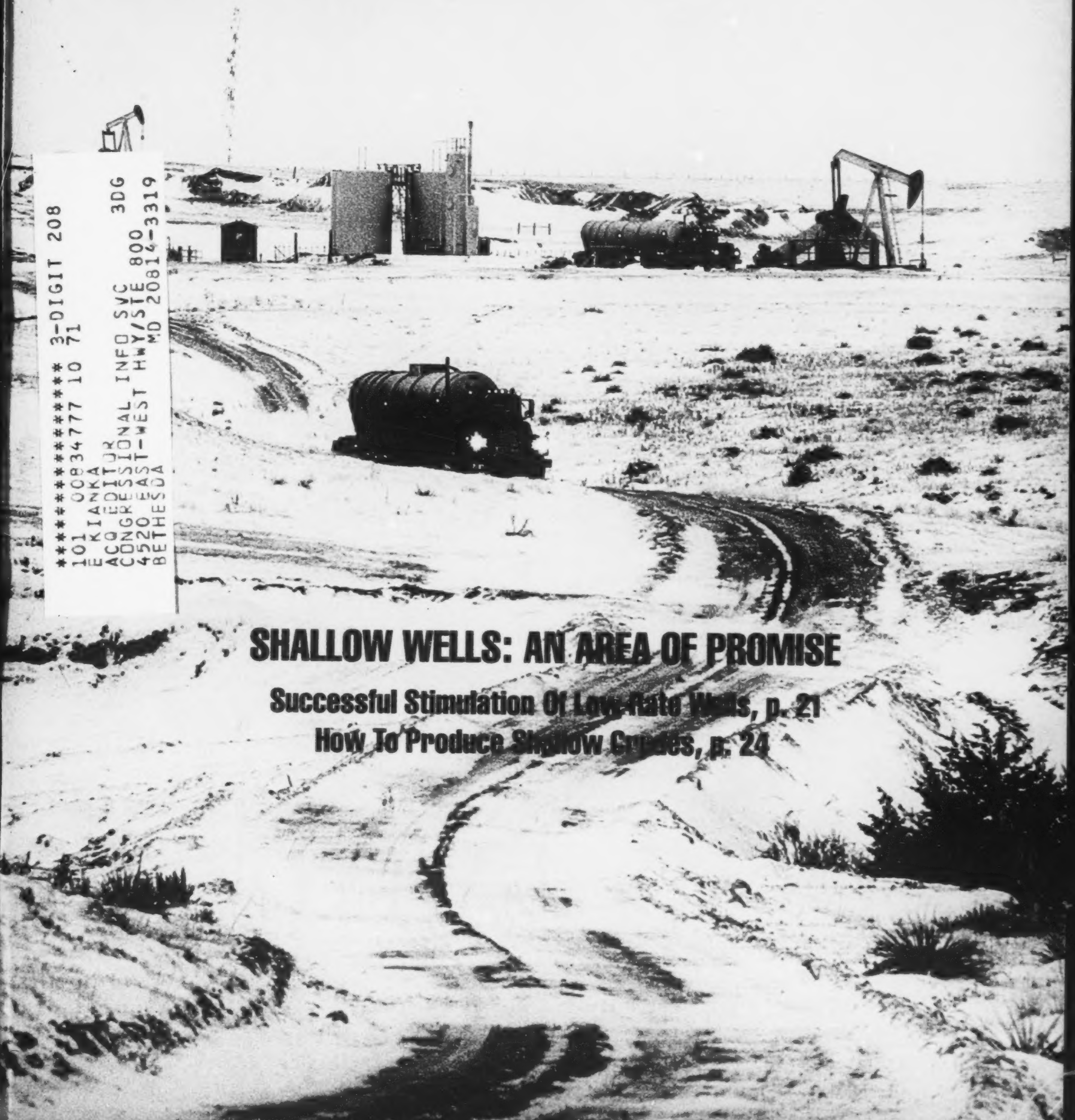

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CONGRESSIONAL INFO SVC
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1984 Rig Count To Top Last Year's Average

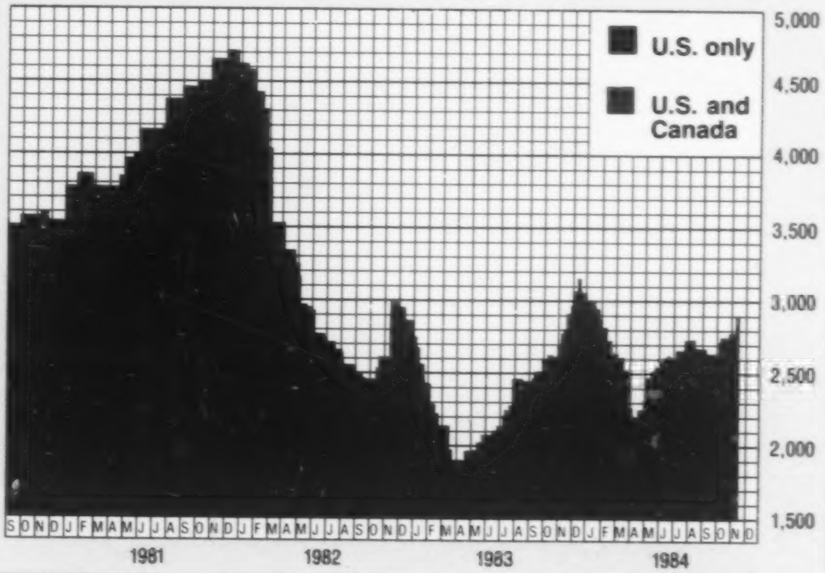
Indications now are that the final U.S. rig count for 1984 will be close to 200 rigs higher than the 1983 average of 2,232. Our projections, made without benefit of either entry or exit polls, are for the year-long average this year to come in at right about 2,415 active rotary rigs.

The count as of this writing, in mid-November, stands at 2,393, but U.S. drillers seem to have broken out of the summer doldrums that had them hovering at the 2,400-mark for four months. They now are approaching 2,600. And, with a strong week by Canadian drillers in mid-November, the overall U.S. and Canadian active rig count is approaching the 3,000-mark for the first time since last January.

Rotary rigs actually making hole in United States & Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Oct. 22, 1984	Oct. 29, 1984	Nov. 5, 1984	Nov. 12, 1984
Alabama				
Land	16	12	12	13
Inland Waters	3	3	3	3
Offshore	1	1	1	4
Total	20	16	16	20
Alaska				
Land	7	7	7	7
Offshore	7	7	8	9
Total	14	14	15	16
Arkansas	31	24	23	21
California				
Land	88	92	104	103
Offshore	22	24	21	21
Total	110	116	125	124
Colorado	62	60	62	61
Florida	5	5	4	4
Georgia	1	1	1	1
Hawaii	0	0	1	1
Idaho	1	1	1	2
Illinois	49	48	44	43
Indiana	10	10	9	10
Kansas	98	112	130	131
Kentucky	6	6	6	6
North Louisiana	27	30	28	34
South Louisiana				
Inland Waters	50	51	55	56
Land	91	92	92	100
Offshore	143	145	148	143
Total	311	318	323	333
Michigan	40	43	46	43
Mississippi	24	24	27	27
Montana	40	34	45	45
Nebraska	8	6	10	12
Nevada	4	4	5	3
New Jersey				
Offshore	1	1	1	0
New Mexico	102	97	97	91
New York	11	11	7	8
North Dakota	45	39	42	46
Ohio	76	77	80	80
Oklahoma	311	307	308	318
Oregon	1	1	1	2
Pennsylvania	46	47	49	50
South Dakota	2	3	3	3
Tennessee	1	1	0	0
Texas				
Offshore	48	49	51	48
Inland Waters	6	5	4	4
Dist. 1-S. Central Tex.	15	16	15	13
Dist. 2-Middle Tex.	33	26	38	38
Dist. 3-Upper Tex.	111	119	92	97
Dist. 4-Lower Tex.	81	81	83	83
Dist. 5-Northeast Tex.	28	27	22	22
Dist. 6-Far Northeast Tex.	70	70	64	60
Dist. 7B-N. Central Tex.	54	48	52	58
Dist. 7C-W. Central Tex.	66	66	65	67
Dist. 8-Far West Tex.	149	152	166	174
Dist. 8A-West Tex.	77	75	87	85
Dist. 9-N. Tex.	77	86	77	83
Dist. 10-Tex. Panhandle	45	43	40	46
Total	860	863	856	878
Utah	49	44	47	48
Vermont	1	1	0	0
Virginia	3	0	1	1
Washington St.	1	0	0	0
W. Virginia	41	40	34	38
Wyoming	126	129	134	131
Total U.S.	2,511	2,503	2,554	2,597
Canada	265	252	227	290
Canada – Offshore	13	13	13	13
U.S. and Canada	2,789	2,768	2,794	2,900



PETROLEUM ENGINEER INTERNATIONAL (USPS 01648321) published 15 times each year, monthly plus March 15, July 15, and November 15, by Energy Publications Division, Harcourt Brace Jovanovich, P.O. Box 1589, Dallas, Texas 75221-1589. Accounting and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. December 1984, Volume 56, No. 15. Copyright © 1984 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Subscription rate to personnel employed by companies involved with exploration, drilling, or production of oil or gas: one year $16.00, three years $32.00 for North, Central, and South America. Outside North, Central, and South America: one year $35.00, three years $55.00. Subscription rate for all others: $50.00 for one year. Single copy price $3.00. Second class postage paid at Duluth, Minnesota and additional mailing offices. Microfilm copies are available through University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Michigan 48106. Indexed by Applied Science, Technology Index, and the Engineering Index, Inc.

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Postmaster: Send address changes to Petroleum Engineer International, P.O. Box 1589, Dallas, Texas 75221-1589, USA.

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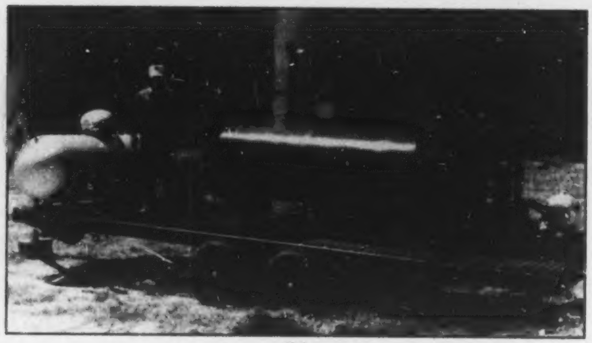
DECEMBER 1984

NUMBER 15 VOLUME 56

21



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SHALLOW WELLS: AN AREA OF PROMISE

Shallow Well Stimulation Demands Good Engineering 21

by George E. King, Amoco Production Research. Although any increase in drilling quality or damage removal treatment is an added expense, decreasing formation damage can improve productivity, even on a tight budget.

How To Produce Shallow, High WOR, Heavy Crude 24

by Charles D. Haynes, Belden & Blake Corp. High oil viscosity, corrosive salt water, and directionally drilled wells in isolated locations are common conditions that, when coupled with high produced water content, present an ongoing challenge.

Multidrain Drilling Ups Production 34

Staff Report. Any well that has a low production rate due to low permeability, viscous crude, or low reservoir pressure is a likely candidate for the multidrain system, which can increase production in the same way as an additional well would.

Shallow Well Operations Aren't Always Simple 36

by Steven D. Moore, Drilling Editor. Formation characteristics determined from previous logs and cores can be helpful in selection of the best completion and production methods as well as the best drilling fluid for minimizing formation damage.

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ABOUT THE COVER: Shallow wells, often located in remote locations with harsh environments, account for nearly 70% of producing oil wells in the U.S. (Photo courtesy of Diamond Shamrock Corp.)

NEXT MONTH: The Field Development issue in January covers methods and technology involved in planning and executing drilling and production programs in known fields.

Shallow Wells Aren't Always Simple

by Steven D. Moore, *Drilling Editor*

So what's exciting about a shallow well? To outside observers and even most major operators, very little. Deep wells garnish media attention because of their high costs and potentially high daily production volumes. A good percentage of research – by both major operators and service companies – continues to be directed toward deep wells.

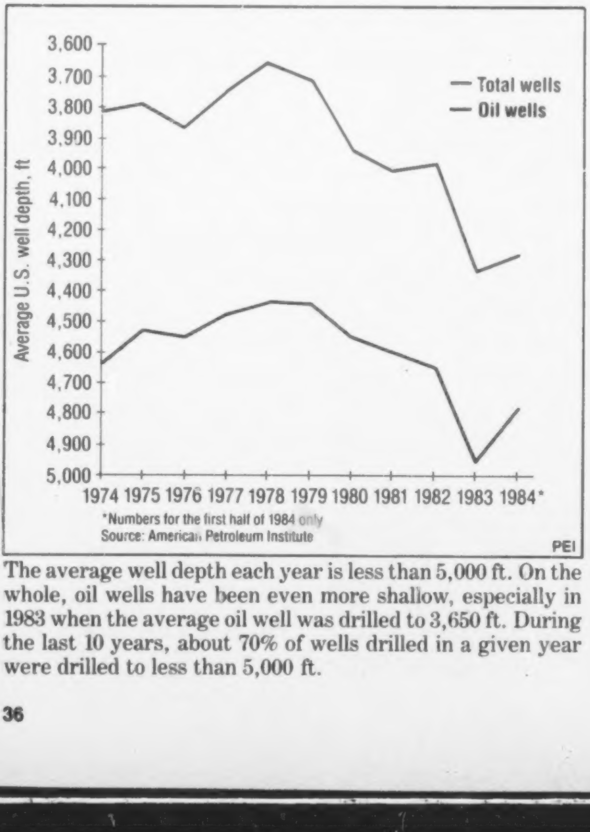
But these trends have not stifled shallow well operations. Shallow wells hold a dominant share of market and are, in fact, the lifeline of independent producers.

Shallow wells are attractive to independents because they allow an operator to spread the risk over several wells. An operator can drill 10 shallow wells for the cost of drilling one deep well. Admittedly, that one deep well could produce more than 10 shallow wells combined, but that deep well could be a dry hole, too.

Statistics confirm the industry's dependence on shallow well operations. According to API, wells drilled last year averaged about 4,270 ft in depth. The average oil well was even shallower – approximately 3,650 ft. Of all the wells drilled in 1983, 69% had total depths of less than 5,000 ft.

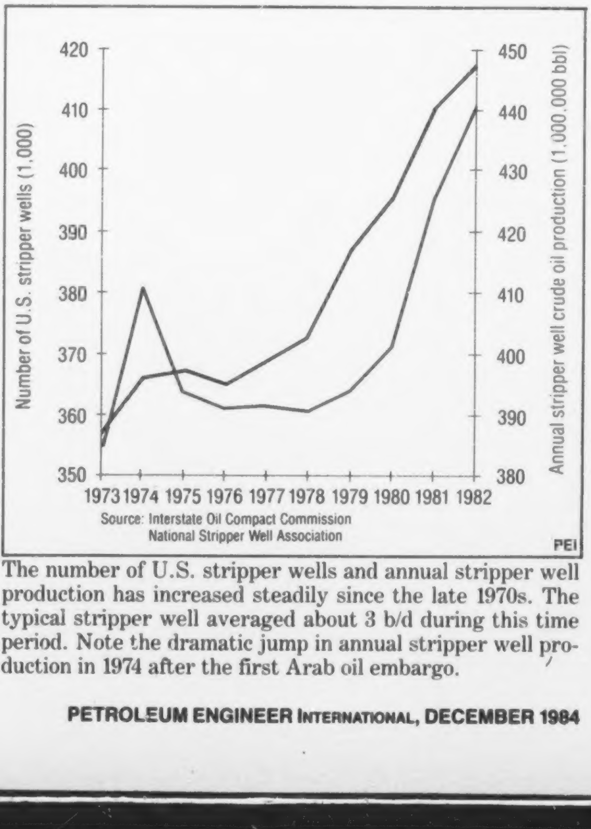
Nearly 70% of producing oil wells in the U.S. are classified as stripper wells – that is, producing less than 10 b/d of oil. And in virtually every case, a stripper well is shallow.

On a national average, stripper wells produce about 3 b/d of oil. In Pennsylvania, the average stripper produces less than 0.5 b/d of oil. Can an operator make money on such low-volume producers? With 416,000 stripper wells producing oil at the beginning of 1983, obviously operators think they are profitable.[1]



*Numbers for the first half of 1984 only
Source: American Petroleum Institute

The average well depth each year is less than 5,000 ft. On the whole, oil wells have been even more shallow, especially in 1983 when the average oil well was drilled to 3,650 ft. During the last 10 years, about 70% of wells drilled in a given year were drilled to less than 5,000 ft.



Source: Interstate Oil Compact Commission
National Stripper Well Association

The number of U.S. stripper wells and annual stripper well production has increased steadily since the late 1970s. The typical stripper well averaged about 3 b/d during this time period. Note the dramatic jump in annual stripper well production in 1974 after the first Arab oil embargo.

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Cost of drilling and equipping wells–1982

The following table compares the costs of drilling and equipping shallow wells–in Illinois, Indiana, and Appalachia–to the national average. Note the significant cost per foot differential.

	Number of wells drilled	Footage drilled	Total cost, $	Depth per well, ft	Cost per well, $	Cost per foot, $/ft
Illinois	2,856	7,671,190	239,164,565	2,686	83,741	31.18
Indiana	1,012	1,960,915	57,603,679	1,938	56,921	29.38
Appalachia	8,467	29,093,342	1,161,134,621	3,436	137,126	39.91
Subtotal	12,335	38,725,447	1,457,902,865	3,139	118,192	37.65
Total U.S. land	76,565	361,637,121	38,873,419,401	4,723	507,718	107.49

Tight Budgets

Most shallow wells are drilled by smaller companies on limited budgets. To avoid extra costs, many independents will forego seismic surveys and field studies, and instead review data already generated from other sources.

Scrutinizing old logs and well records may uncover a pay zone previously missed. Drilling another 100 ft may tap a second productive interval. Conversely, re-evaluating upper hole sections may detect hydrocarbons that were never anticipated – and therefore overlooked – when the well was originally drilled.

For example, hundreds of wells were drilled to a deep target in the Greybull field of Wyoming beginning in 1918, with operators overlooking the shallow Peavy sand, 250 to 350 ft below the surface.[2] In the late 1950s, someone finally discovered that this 100-ft thick sand was productive. In fact, about 800,000 bbl of high-gravity oil have been recovered from a 60-acre block of the Peavy sand, compared to 250,000 bbl of oil – produced over a 60-year period – from the deeper pay zone across the entire field.

A well tapping the Peavy sand can produce about 10,000 bbl per acre through primary recovery methods. These shallow wells – usually on 2-acre spacings – can be drilled and completed for as little as $20/ft, or approximately $6,000 to $7,000 per well. With the wells initially producing 15 to 20 b/d of oil, payout can occur quickly.

Good Engineering Needed

Drilling a shallow well may not be as demanding as a deeper well, but sound engineering practices are required to successfully exploit a reservoir. Today most shallow wells are drilled under footage or turnkey contracts, but contractors must be capable of providing a usable hole with minimum formation damage. Thousands of wells over the years have been abandoned or have severe production limitations because of poor drilling and completion techniques.

A first consideration in drilling a shallow well is to determine the formation characteristics. From previous logs and cores, the best completion, stimulation, and production methods can be selected. Further, by understanding the formation characteristics, the drilling fluid for minimizing formation damage can be determined.

In many cases the operator should consider air or foam drilling. Air drilling is faster than mud drilling and also reduces the chance for formation damage. Although more surface equipment is needed, air drilling eliminates the cleanup problems encountered with a mud system. In addition, air drilling allows detection of hydrocarbon intervals that could be passed over when using a drilling mud.

A variety of rotary drilling rig types is available for shallow well drilling. Only in a few isolated areas are cable tools employed on a regular basis. Most rigs are truck mounted and highly portable, capable of reaching TD in 2 to 5 days. Usually these portable rigs are capable of running surface casing, as well as a longer production casing string. For extremely shallow wells, a water well rig may be the best option.

Another cost savings consideration is re-entering an old well to reach the drilling objective, thus avoiding the cost of a surface casing string. If this option is unavailable, determine the minimum amount of surface casing that will avoid potential problems with contamination of the water aquifers and later with well bore stability.

Completion Techniques

If insurmountable formation damage is suspected or if the well is an apparent dry hole, running and cementing a casing string may be an unnecessary expense. To save the cost of a casing string and cement job, some operators run an external packer on the bottom of the casing string to just above the completion zone. The packer is set and a modified drill stem test is run. If the well is unproductive, the packer is released and the casing string retrieved. If the well is worth completing, the casing string is cemented in place by either pumping cement through ports above the packer or down the annulus from top to bottom.

If this type of completion design is combined with an air drilling operation, the potential for formation damage is virtually eliminated. Also, by leaving the productive interval uncased, perforations are not necessary.

Another approach is the tubingless completion. Fluid is produced up the casing, thus one pipe string is eliminated. The technique is particularly effective in low-pressure gas wells where 2⅜- or 2⅞-in. tubing is used as casing.

Some operators use standard tubing for casing in oil wells, too. Instead of sucker rods, operators use 1-in. tubing with a modified pump on the bottom, which enables oil to be pumped up the 1-in. string.

In many areas, stimulation is an important part of the successful completion of a shallow well. Some producers treat the well immediately after the production string is run and the well is perforated. Other operators wait up to 30 days before treating the well. These decisions depend largely on operator preference and formation characteristics.

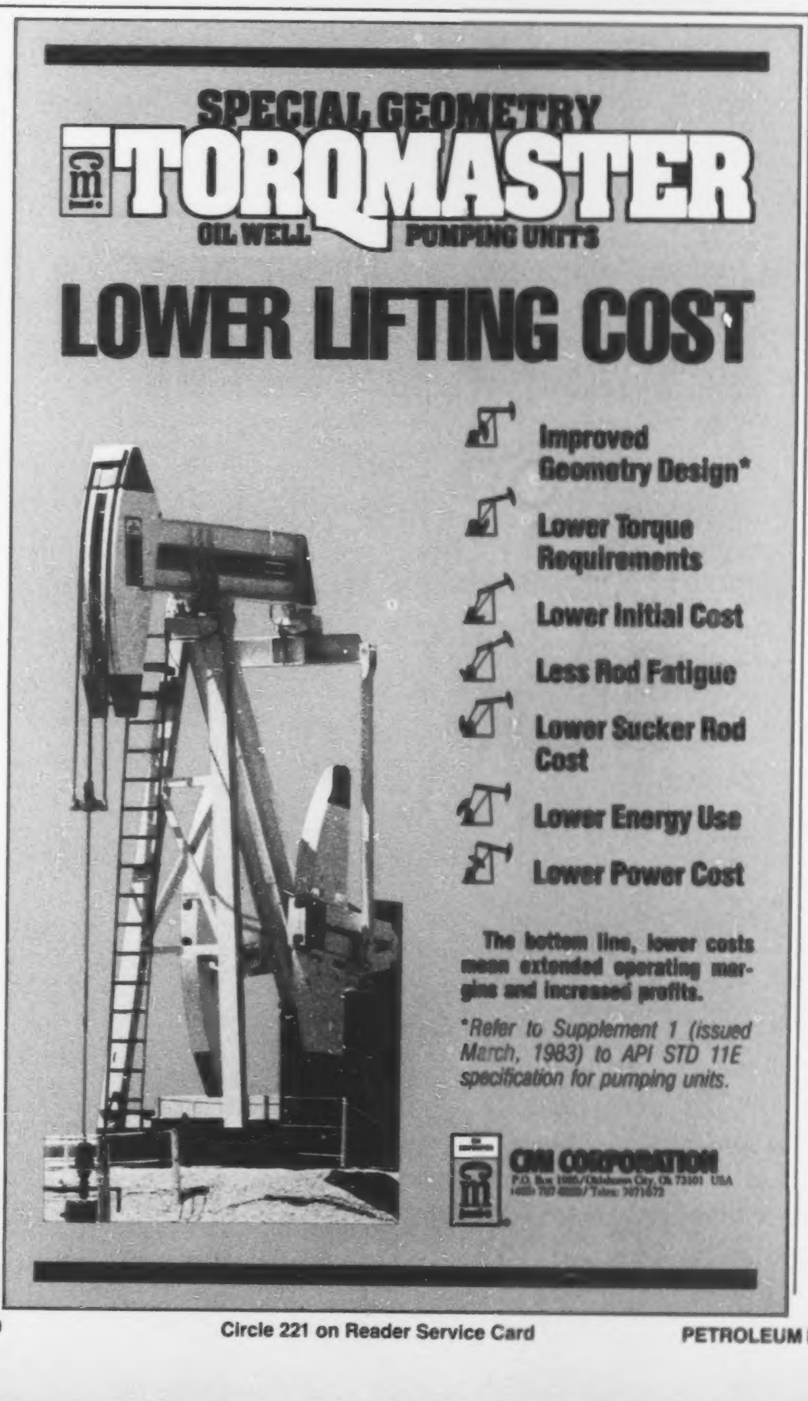
Fracturing techniques vary from area to area, but one of the more interesting methods is used in the Appalachia region for low-pressure wells. The wells are typically openhole completions, commonly called barefoot completions, and have multiple pay zones.[3]

The well is open hole below the surface casing to TD and a fillback method is used for treating each zone. Sand or pea gravel is pumped down the well, filling the well bore from TD to just below the uppermost zone to be treated. Care is taken in loading the gravel to avoid bridging. A straddle packer is run and set on top of the zone. Next, the zone is treated, typically with a water-base fracturing fluid.

After treatment, the packer is unseated and the well is reverse circulated, washing out gravel between the treated zone and the next lower zone. The process is repeated until the bottom-most zone is treated. This type of stimulation treatment is effective and inexpensive. Occasional problems do arise—for example, the packer fails and must be fished, the treatment comes around the packer, or the treatment goes out of the zone.

One operation given little consideration is swabbing a loaded well.

(Continued)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**Refer to Supplement 1 (issued March, 1983) to API STD 11E specification for pumping units.*

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The procedure is straightforward, but if you pull too hard on the formation during swabbing, the formation can start to come in and sand up the well bore.[4] A variety of problems can result, including losing the well completely. At the least, some type of bailing operations will be required.

Production Equipment

The most important parameters in selecting a production system are economics and service reliability. The standard production method for shallow wells continues to be beam pumping units. Beam pumping units, sucker rods, and downhole pumps are readily available and easy to operate and understand.

Other production methods being used with varying success are air and gas lift, and submersible, hydraulic, and progressive cavity pumps.

One method gaining popularity in shallow well applications is the hydraulic pumpjack, which hydraulically moves the sucker rods in and out of the hole. The new generation of hydraulic pumpjacks is lightweight, easy to repair, and cost competitive. In many cases, these pumps have longer strokes than comparable beam pumping units.

Another method finding more use is the progressive cavity pump, which operates much like an auger.[5] Although introduced in 1936, this pump has grown in popularity only recently, partially because of increased production of heavy crudes. The pump has only one moving part – a rotor housed inside a stator.

Because of the pump's simple design, there are only two variables to consider when selecting the right pump size. The first is capacity, which is determined by the size of the cavities formed between the rotor and stator. Larger cavities generate higher flow rates at a given well depth and rotation speed.

The second variable is depth capability, which is determined by the number of sealed cavities formed between the rotor and stator. Generally, the pump will produce at a greater depth and higher pressures when equipped with a longer rotor and stator for a given capacity rating.

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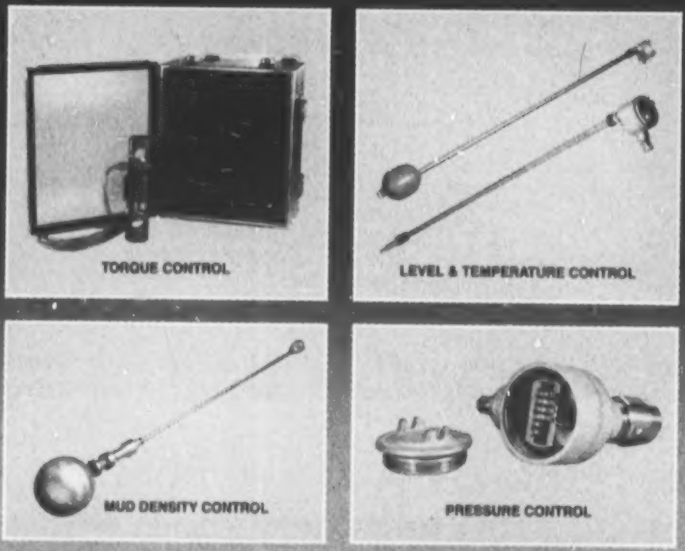

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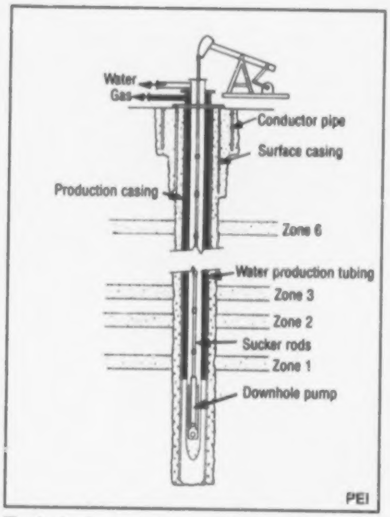
TRW Producing Coalbed Gas



Typical schematic for a coalbed methane well after completion of drilling and casing.

TRW Inc. of Redondo Beach, Calif., a manufacturer of percussion drilling equipment (among other things), has gone into the natural gas business with a unique process that extracts pipeline-quality methane from coal beds.

Recovery and sale of methane from coal deposits near Tuscaloosa, Ala., is TRW's first venture into using its technology to develop energy for commercial business. TRW gas is being recovered from wells completed in Alabama's Black Warrior Basin. Drilling for the project began in 1982.

A second Warrior Basin project is just getting under way and will be developed at the rate of 16 wells per year after field testing and successful negotiation of a gas sale contract.

The program is an outgrowth of a research and development effort begun in 1976 under sponsorship of the U.S. Department of Energy. Currently, TRW is working with the Gas Research Institute to expand the coalbed methane technology.

Production from coalbed reservoirs uses drilling and completion techniques that are similar to those for conventional gas wells. Coalbeds are tight reservoirs and generally require stimulation for commercial levels of production. The coalbeds also have high water-saturation levels, so they require dewatering to increase gas flow.

As indicated in the accompanying illustration, it is most economical to drill into geologic structures with multiple layers of coal seams and to sequentially tap them for methane gas. As water is removed from the coal formation, gas flows into the well casing and moves to the surface under its own pressure. From there, the gas moves through a gathering system to be compressed and dried before delivery to the pipeline.

Kye Trout Picked For Chief Roughneck

Kye Trout Jr., an independent oil producer in the Bismarck, N.D., area, was selected to be the 30th Chief Roughneck during the annual membership luncheon of the Independent Petroleum Association of America in San Diego, Calif.

A native of northeastern Indiana, Trout attended the University of Texas for 3 years, and received his BS degree in geology and petroleum engineering from Penn State University in 1944. While working in the West Texas oil fields during the late 1940s he continued his affiliation with UT, teaching off-campus courses in drilling and production.

He traveled north in the early 1950s to explore the Williston Basin of North Dakota, and became an independent producer in the Cut Bank field in 1955. He began his business of oil and gas and mineral acquisition, development, exploration, and evaluation in Bismarck in 1960.

The Chief Roughneck award was conceived in 1955 by Lone Star Steel Co. as a means of recognizing the nation's leaders in oil and gas exploration and production. This year, as usual, the identity of the new Chief Roughneck was not revealed until the moment of his announcement, which was made at the IPAA luncheon by B. C. Robertson, executive vice president of marketing and sales for Lone Star Steel. During his remarks, Robertson said that, "We in Texas owe a special thanks to Kye Trout because of his guidance and leadership in establishing the nation's first drilling and production technology program at Kilgore College in eastern Texas."

Kye Trout Jr. (right) receives the trappings of office as Chief Roughneck, 1984, from B. C. Robertson, executive vice president, marketing and sales, for Lone Star Steel Co.

Energy Consumption To Rise Next Year

Energy consumption will continue to increase next year, according to the Independent Petroleum Association of America's Supply and Demand Committee, which also expects natural gas production to be significantly higher.

Oil demand is expected to have risen by about 4% this year, ending a 5-year decline. In addition, natural gas production is said to have increased by 5% in 1984, ending a 4-year decline. An additional increase of 2% is projected for 1985.

With regard to overall oil supplies, the committee predicts that, with the strong growth in the U.S. economy during 1984, increased demand will occur for virtually all petroleum products.

In 1985, the committee says, total petroleum supply is expected to be virtually unchanged from 1984. Crude oil imports, however, are predicted to be up close to 260,000 b/d, while product imports should drop by 50,000 b/d.

The committee anticipates demand for oil to average 15.9 million b/d next year, up only slightly from the 15.8 million b/d estimated for 1984.

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HNG Completes Dakota Wildcat

HNG Oil Co. has successfully completed a wildcat well in McKenzie County, North Dakota. It tested 500 Mcfd of natural gas and 336 b/d of oil on a 20/64-in. choke at a flowing tubing pressure of 1,800 to 1,850 psi. Perforations are in the Red River C zone at 13,801-18 ft.

Total depth of the well, HNG Neer No. 11-1, is 13,950 ft.

Modest Gain Seen In International Rig Count

Strong showings by European, Latin American, and South Pacific drillers led to a 15-rig gain in the International Rotary Drilling Rig Report during the September 1983 to September 1984 period, according to Hughes Tool Co. of Houston.

Europe picked up 36 active rigs during the year, most of them traceable to the UK, Italy, and Holland. Latin America, led by Mexico, added 11 rigs. The South Pacific, paced by Australia, showed a 10-rig increase.

Among the losers during the period covered by this report is Africa, with a loss of 26 active rigs – 14 of them in Algeria. The Far East was off by 14 rigs, 11 of them in Indonesia, and the Middle East experienced a 3-rig decline.

The full tally follows:

International Rotary Rig Activity, as reported by Hughes Tool Co.
(Figures in parentheses indicate how many of each country's rigs are offshore rigs.)

	Sept. 1983	Aug. 1984	Sept. 1984
Africa			
Algeria	40	26	26
Angola	10(8)	7(5)	7(5)
Benin	1(1)	1(1)	1(1)
Cameroun	5(5)	5(5)	5(5)
Gabon	6(6)	6(5)	6(5)
Ivory Coast	1(1)	2(2)	2(2)
Libya	27(2)	25(2)	24(2)
Nigeria	16(6)	11(5)	11(5)
Rep. of Congo	4(4)	3(3)	3(3)
Rep. of Zaire	2(1)	3(1)	3(1)
Somalia	0	1	1
South Africa	2(2)	2(2)	3(2)
Sudan	5(1)	1	1
Tanzania	1	1	1
Tunisia	5(2)	5	6
	130(39)	103(31)	104(31)
Europe			
Austria	9	7	4
Denmark	5(4)	3(3)	3(3)
France	20(1)	22(1)	20

Germany	24	20	23
Greece	3(1)	4(1)	4(1)
Holland	15(7)	18(10)	18(10)
Ireland	1(1)	2(1)	2(1)
Italy	20(5)	29(6)	29(6)
Norway	7(7)	9(9)	9(9)
Portugal	1	0	0
Spain	9(3)	11(4)	10(4)
UK	45(43)	65(59)	61(55)
Yugoslavia	14(2)	27(2)	27(2)
	174(74)	217(96)	210(91)
Far East			
Bangladesh	2	3	5
Brunei	9(7)	9(7)	9(7)
Burma	31(1)	33(1)	34(1)
India	57(16)	57(17)	57(17)
Indonesia	93(27)	82(28)	82(28)
Japan	20(1)	16(3)	19(3)
Malaysia	10(10)	9(9)	9(9)
Pakistan	17	16	16
Philippines	7	3	2
Taiwan	5(1)	4(1)	7(1)
Thailand	14(7)	11(6)	12(6)
	265(70)	243(72)	251(72)
Latin America			
Argentina	64	92	94
Barbados	1	2	2
Bolivia	8	6	6
Brazil	78(27)	67(22)	72(26)
Chile	6(3)	6(3)	6(3)
Colombia	13	19	17
Costa Rica	1	1	1
Ecuador	5	3	2
Guatemala	1	1	1
Mexico	185(28)	192(29)	200(32)
Peru	16(6)	18(7)	16(7)
Trinidad	9(4)	7(2)	8(2)
Venezuela	36(12)	27(9)	30(9)
	443(80)	441(72)	454(79)
Middle East			
Abu Dhabi	29(19)	30(20)	30(20)
Bahrain	1	0	0
Dubai	8(5)	6(4)	5(4)
Egypt	30(13)	35(21)	34(20)
Iran	20(2)	20(2)	20(2)
Iraq	18	18	18
Jordan	3	3	3
Kuwait	6	6(1)	6(1)
Oman	13	11	11
Qatar	3(2)	2(1)	2(1)
Saudi Arabia	25(13)	14(5)	14(5)
Syria	16	25	25
Turkey	24	24	24
Umm Al Qaiwain	1	0	0
South Yemen	0	1	1
	197(54)	195(54)	194(53)
South Pacific			
Australia	27(11)	40(12)	38(10)
New Zealand	2	1	1
Papua New Guinea	1	1	1
	30(11)	42(12)	40(10)
Totals	1,238 (328)	1,241 (337)	1,253 (336)

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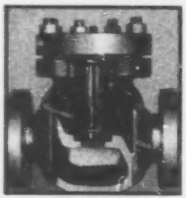

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Letters

TO THE EDITOR:

I contend that it is unrealistic to write a totally Republican-opinionated article via Mr. W. B. Bleakley (Course of Oil, PEI, September 1984, p. 6) as if all your subscribers are Republicans.

I do not believe the name "Petroleum Engineer" means that you must be a Republican to appreciate your magazine, although I have never seen the Democratic view expressed.

George E. Coleman
Farmington, N.M.

TO THE EDITOR:

We would be interested in receiving a copy of the Grace Commission Report mentioned in your September 1984 issue (Comment, p. 112).

Please forward a copy to my attention.

Ronald S. Schraeder
F&M Oil Co. Inc.
Wichita, Kans.

Copies of the entire two-volume, 656-page report are hard to come by, but a report on the report is available from the Foundation for the President's Private Sector Survey on Cost Control Inc. at 1511 K Street N.W., Suite 600, Washington, D.C. 20005. – Ed.

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U.S., Canadian Drillers Keep 3,000 Rigs Rotating

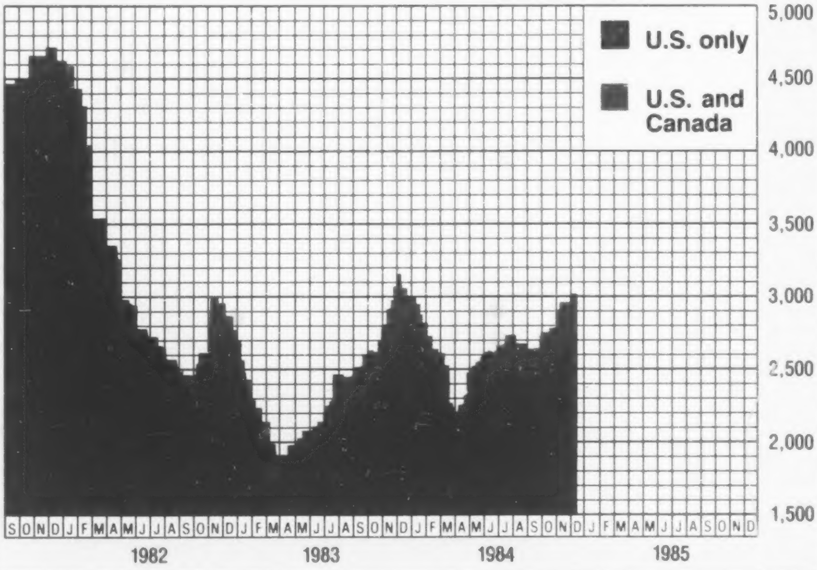
The combined U.S.-Canadian rotary rig count has gone over the 3,000-mark for the first time since last January. The U.S. count of active rigs reached 2,728 in mid-December to mark the high point for the year. Canadian drillers, at the same time, were keeping 338 rigs busy for their highest count since last March.

Although Canada's new Conservative government has been in office only 3 months, that country's energy sector already is responding to Prime Minister Brian Mulroney's pledge to change the National Energy Program which had resulted in drastic cutbacks in drilling, particularly in Alberta.

Rotary rigs actually making hole in United States & Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Nov. 19, 1984	Nov. 26, 1984	Dec. 3, 1984	Dec. 10, 1984
Alabama				
Land	11	11	13	13
Inland Waters	1	1	1	1
Offshore	4	4	4	4
Total	16	16	18	18
Alaska				
Land	8	9	11	11
Offshore	9	9	9	9
Total	17	18	20	20
Arkansas	29	28	27	30
California				
Land	113	110	112	115
Offshore	21	20	18	19
Total	134	130	130	134
Colorado	65	64	60	60
Florida	4	4	3	3
Hawaii	1	1	1	1
Idaho	2	2	2	2
Illinois	45	43	42	35
Indiana	12	11	8	8
Kansas	140	141	138	139
Kentucky	7	6	8	8
North Louisiana	30	27	22	27
South Louisiana				
Inland Waters	62	63	66	66
Land	103	104	105	113
Offshore	152	154	161	155
Total	347	348	354	361
Michigan	44	44	45	44
Mississippi	30	33	33	47
Montana	45	37	36	34
Nebraska	13	13	12	12
Nevada	7	7	7	8
New Mexico	94	89	92	86
New York	8	9	12	13
North Dakota	50	50	49	49
Ohio	79	74	74	72
Oklahoma	332	326	328	326
Oregon	2	2	3	3
Pennsylvania	50	27	45	46
South Dakota	3	4	5	5
Texas				
Offshore	48	52	48	59
Inland Waters	2	2	4	1
Dist. 1-S. Central Tex.	15	20	16	16
Dist. 2-Middle Tex.	32	43	39	35
Dist. 3-Upper Tex.	112	103	96	104
Dist. 4-Lower Tex.	80	87	103	104
Dist. 5-Northeast Tex.	27	30	30	34
Dist. 6-Far Northeast Tex.	54	62	65	71
Dist. 7B-N. Central Tex.	60	71	74	58
Dist. 7C-W. Central Tex.	71	68	73	73
Dist. 8-Far West Tex.	171	185	165	166
Dist. 8A-West Tex.	83	81	80	82
Dist. 9-N. Tex.	84	80	69	73
Dist. 10-Tex. Panhandle	52	60	58	62
Total	891	944	920	938
Utah	48	48	40	47
Virginia	1	0	0	0
W. Virginia	38	30	44	48
Wyoming	129	133	130	131
Total U.S.	2,683	2,682	2,686	2,728
Canada	297	290	314	326
Canada – Offshore	14	13	13	12
U.S. and Canada	2,994	2,985	3,013	3,066



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PETROLEUM ENGINEER INTERNATIONAL (USPS 01648321) published 13 times each year, monthly plus July 15, by Energy Publications Division, Harcourt Brace Jovanovich, P.O. Box 1589, Dallas, Texas 75221-1589. Accounting and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. January 1985, Volume 57, No. 1. Copyright © 1985 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Subscription rate to personnel employed by companies involved with exploration, drilling, or production of oil or gas: one year $18.00, three years $36.00 for North, Central, and South America. Outside North, Central, and South America: one year $38.00, three years $58.00. Subscription rate for all others: $50.00 for one year. Single copy price $3.00. Second class postage paid at Duluth, Minnesota and additional mailing offices. Microfilm copies are available through University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Michigan 48106. Indexed by Applied Science, Technology Index, and the Engineering Index, Inc.

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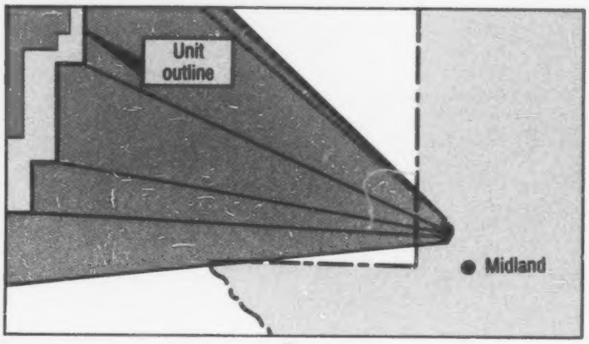
JANUARY 1985

NUMBER 1 VOLUME 57



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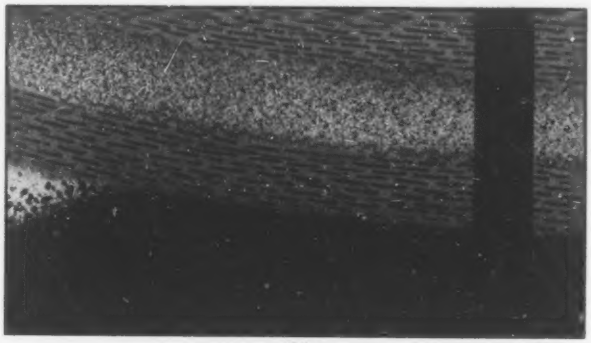

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FIELD DEVELOPMENT

Exxon Pumps New Life Into Old Field 21

by Steven D. Moore, Drilling Editor. A huge infill drilling and enhanced oil recovery project for the Means field includes the drilling of 443 new wells. Production at the field is expected to rise from 8,800 b/d to 15,000 b/d.

What's CO_2 Worth In Miscible Floods? 24

by Michael J. Hyland and Kenneth M. Stern, Chem Systems Inc., and Alan M. Wolsky and Donald J. Jankowski, Argonne National Laboratory. Maximum permissible cost depends on cash flow, but CO_2 must be injected long before production increases.

Pioneering Startups At Garoupa And Cormorant 30

by Derrick Booth, Subsea Data Services. Both Cormorant, in the North Sea, and Garoupa, offshore Brazil, are completed for subsea duty, and each represents a successful milestone achievement. There are, however, intriguing differences.

KCA Designs Quiet, Unobtrusive Rig 42

by W. B. Bleakley, Editor. Operators now can avoid many of the planning and consent problems they face while requesting permits to explore in environmentally sensitive areas where rural attitudes and lack of wide-open spaces are causes for concern.

What's New In Drilling And Production 46

A safety device designed to detect pinhole pressure leaks in oil and gas production systems is among the products described this month. There's also a high-strength proppant that simultaneously resists crushing, embedment, and flowback.

Ultrahigh Sand Concentrations Boost Oklahoma Production 50

by Subhash N. Shah and David R. Smith, Halliburton Services. Recent developments in equipment and fluids have made it possible to pump sand up to a concentration of 20 lb/gal, thereby yielding concentrations greater than 2 lb/sq ft in the fracture.

DEPARTMENTS

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ABOUT THE COVER: Development of oil and gas fields does not always take place on rocky slopes and frozen tundra. Sometimes the settings are pastoral. (Photo courtesy of Diamond Shamrock Corp.)

NEXT MONTH: With a growing proportion of the world's oil and gas reserves being found offshore, the February issue will concentrate on international offshore engineering.

Stripper Well Output Up By 20 Million Bbl

U.S. stripper well data for the past 10 years

Year	No. wells	Production, M bbl	Abandonments	Avg. daily prod. per well
1974	366,095	411,936	13,779	3.08
1975	367,872	394,163	13,478	2.93
1976	365,733	392,191	9,916	2.93
1977	368,930	392,532	9,000	2.91
1978	374,635	391,633	8,380	2.86
1979	386,310	394,405	7,668	2.79
1980	395,176	401,095	6,614	2.77
1981	409,539	426,502	7,215	2.85
1982	416,493	441,951	9,426	2.90
1983	441,501	462,013	11,032	2.87

Stripper wells in the U.S. registered an increase of more than 20 million bbl during 1983 to mark the fifth year in a row that production of stripper oil outpaced the previous year's output.

Abandonments, however, are up also, for the third straight year.

The annual National Stripper Well Survey, prepared by the Interstate Oil Compact Commission and the National Stripper Well Association, shows that there were 441,501 stripper wells in operation as of Jan. 1, 1984, and that during the 1983 calendar year they produced 462,013,486 bbl of stripper oil. By comparison, there were 416,493 stripper wells as of Jan. 1, 1983, and they produced 441,951,028 bbl of crude. There was, therefore, a 1-year increase of 25,008 wells and an increase in production of 20,062,458 bbl.

G. E. Stahl, president of the National Stripper Well Association, points out that stripper well abandonments decreased from 13,483 in 1972 to 6,614 in 1980 because "increased price of crude oil, no doubt, extended the life of all stripper wells."

In 1981, however, abandonments increased about 600 nationwide to 7,215 and in 1983 to 11,032, an increase of 3,817. Stahl attributes this to price decreases, and he adds that "any change in stripper well tax provision will cause an even greater increase in well abandonments."

Exxon Tests Two Mississippi Wildcats

Two Exxon Co. U.S.A. wildcats have tested natural gas from a potential new field in Pearl River County, Mississippi, about 6 miles west-southwest of Poplarville.

The Exxon No. 1 Batson-McGehee and the Exxon No. 1 Southern Minerals extended the limits of the Houston producing trend 16 miles to the southeast from the Sandy Hook field.

The Batson-McGehee well tested 6.9 MMcfd of dry gas through a 12/64-in. choke with flowing tubing pressure of 6,040 psi. Drilled to total depth of 15,670 ft, the well tested a 30-ft interval between 15,474 and 15,504 ft.

The Southern Minerals well tested a combined rate of 2.8 MMcfd from two intervals through a 7/64-in. choke with flowing tubing pressure of 4,057 psi. Drilled to 21,778 ft in the Louann Salt, the well was plugged back to test intervals at 15,115-37 ft and 15,459-87 ft.

Wildcatting Down In Australia

A minimum of 218 wildcat and appraisal wells are scheduled to be drilled in Australia during the fiscal year 1984-85. The Australian Petroleum Exploration Association reports that the the figure for the fiscal year from July 1983 to June 1984 was 229 exploration wells, and there were 201 drilled in 1982-83.

An APEA survey indicates a drop in wildcat drilling from 166 to 150 wells, and a 46% decline in seismic work, from 33,652 to about 18,269 miles. The decline is mostly offshore, where 29 exploratory wells are planned, compared with 45 drilled in 1983-84.

Exploration expenditures continue to fall in Australia, and are currently estimated to be about $580 million. The APEA attributes this to the less expensive onshore drilling programs.

Key features of an APEA survey of member companies indicate that:

- 133 wildcat wells are expected to be drilled onshore, with 17 offshore.
- 57 appraisal wells are planned onshore, with 12 offshore.
- 60 development wells are scheduled onshore, with 26 offshore.
- Seismic work onshore will total about 15,500 miles, with just over 2,500 offshore.
- Total expenditures are estimated at $580 million for exploration and $630 million for development.
- By far the most active areas in Australia are the Cooper-Eromanga and Surat-Bowen Basins, where 78.9% of the programmed exploratory wells will be drilled and 86.7% of the onshore seismic work will be recorded.

Texaco Awarded Egyptian Concession

Getty Oil International (East Charib Egypt) Inc., a wholly owned subsidiary of Texaco Inc., has been awarded sole exploration rights to the East Charib concession, a 79,000-acre offshore area in the Gulf of Suez.

This is the second Egyptian exploration venture in which Texaco is currently active. The other is a 25% interest in the 300,000-acre Mid-Gulf Marine area.

Exploratory drilling is expected to begin at East Charib in 1985.

Terra Completes Five Extension Wells

Terra Resources Inc. has completed five oil wells in the first phase of an extension drilling program in the West White Lake field in Vermilion Parish, Louisiana.

State Lease 5674 wells No. 5, 6, 7, and 8 tested 400 b/d, 132 b/d, 192 b/d, and 242 b/d, respectively, with minor quantities of associated gas. The wells are stepouts to two earlier oil discoveries.

In adjoining State Lease 11424, well No. 1 tested 278 b/d of oil with minor quantities of associated gas.

Reading & Bates Has Oklahoma Discovery

Reading & Bates Petroleum Co. has completed a discovery well in Ellis County, Oklahoma, flowing 150 b/d of oil and 75 Mcfd of gas through a 32/64-in. choke from the Tonkawa formation at 6,51[illegible] ft.

Diamond Shamrock Tests Gas In Gulf

Diamond Shamrock Exploration Co.'s Garden Banks Block 224 No. 1 discovery well in the Gulf of Mexico tested gas at a combined rate of 13.1 MMcfd through an 18/64-in. choke with flowing tubing pressure of approximately 3,600 psi.

Drilled to 16,000 ft from the semisubmersible Zapata Neptune in 750 ft of water, the well struck gas-bearing sands in a Pleistocene interval between 7,860 and 8,400 ft. Location of the well is approximately 120 miles southeast of Galveston, Tex.

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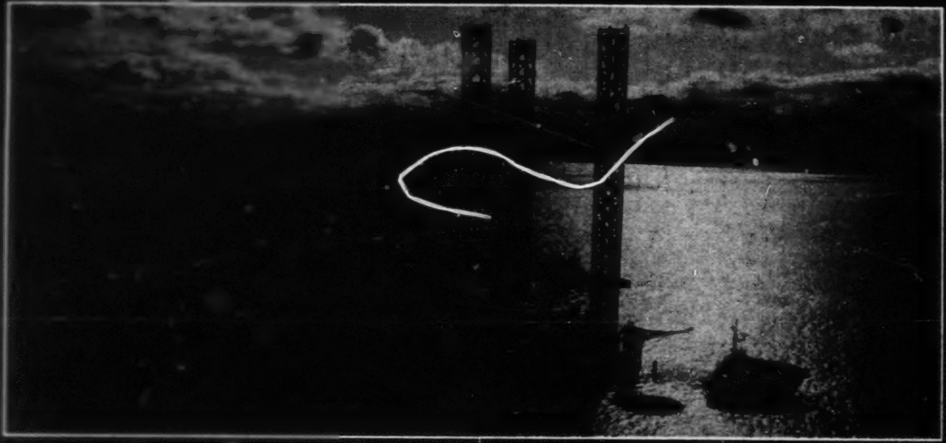

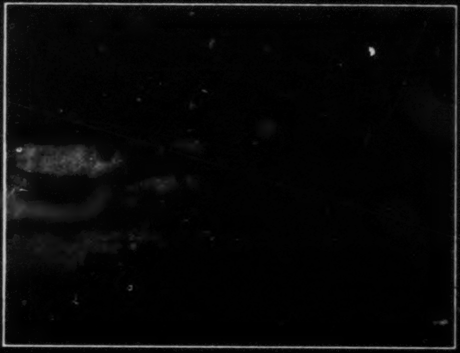

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U.S. Completions Top 81,000 In 1984

Despite a late-December slump that continued into mid-January, U.S. drillers finished 1984 with a year-long average of 2,428 active rigs. Except for the boom years of 1980, 81, and 82, you have to go way back to 1957 to find a year with a higher average rig count.

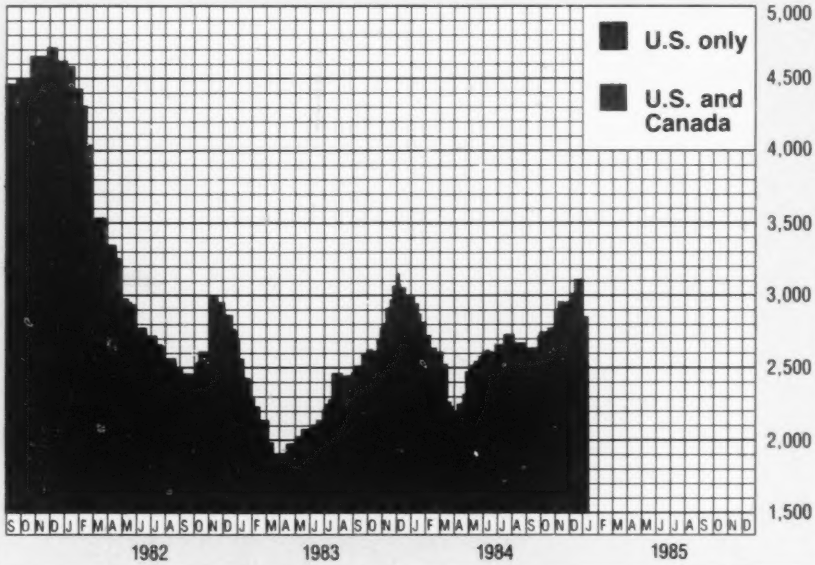
Completions also were close to record levels during 1984. Petroleum Information Corp. reports that 81,665 wells were drilled in the U.S. last year, which puts 1984 into second place – behind only 1982, when 84,693 wells were reported completed.

PI says that 66,577 of 1984's completions were development wells. This includes 40,225 oil wells and 11,778 gas wells. Compared with 1983, development completions were up 3.2%. Of all 1984 wells, 42,602 reportedly were oil completions (up 4.3%), and gas completions numbered 13,385 (down 6.7%).

Rotary rigs actually making hole in United States & Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Dec. 17, 1984	Dec. 26, 1984	Jan. 2, 1985	Jan. 7, 1985
Alabama				
Land	15	14	9	9
Inland Waters	1	1	1	1
Offshore	4	4	4	4
Total	20	19	14	14
Alaska				
Land	11	14	13	12
Offshore	9	9	9	9
Total	20	23	22	21
Arkansas	33	30	28	28
California				
Land	108	114	111	107
Offshore	19	19	18	19
Total	127	133	129	126
Colorado	61	64	61	59
Florida	3	4	4	4
Hawaii	1	1	1	1
Idaho	2	2	2	2
Illinois	43	38	35	24
Indiana	3	4	7	7
Kansas	140	128	123	117
Kentucky	7	6	6	4
North Louisiana	35	37	35	36
South Louisiana				
Inland Waters	59	57	57	51
Land	122	118	107	108
Offshore	146	145	148	154
Total	362	357	347	354
Michigan	43	44	42	41
Mississippi	48	38	42	38
Montana	41	37	31	33
Nebraska	12	11	10	9
Nevada	6	8	11	10
New Mexico	83	77	83	84
New York	13	13	13	13
North Dakota	60	55	48	50
Ohio	73	56	55	70
Oklahoma	352	309	303	299
Oregon	2	2	2	2
Pennsylvania	47	46	46	40
South Dakota	6	6	5	6
Texas				
Offshore	62	61	64	63
Inland Waters	1	2	4	3
Dist. 1-S. Central Tex.	17	22	14	12
Dist. 2-Middle Tex.	42	51	54	53
Dist. 3-Upper Tex.	108	104	102	104
Dist. 4-Lower Tex.	96	101	102	102
Dist. 5-Northeast Tex.	30	25	24	20
Dist. 6-Far Northeast Tex.	77	73	62	64
Dist. 7B-N. Central Tex.	56	49	48	53
Dist. 7C-W. Central Tex.	75	71	73	71
Dist. 8-Far West Tex.	174	169	155	150
Dist. 8A-West Tex.	79	70	76	74
Dist. 9-N. Tex.	76	62	59	63
Dist. 10-Tex. Panhandle	60	57	53	56
Total	953	917	890	888
Utah	51	45	46	48
Virginia	0	0	1	0
W. Virginia	47	42	33	37
Wyoming	[illegible]	[illegible]	137	127
Total U.S.	[illegible]	[illegible]	2,576	2,556
Canada	[illegible]	353	295	296
Canada – Offshore	[illegible]	8	8	11
U.S. and Canada	3,148	[illegible]	2,879	2,863



PETROLEUM ENGINEER INTERNATIONAL (USPS 01648321) published 13 times each year, monthly plus July 15, by Energy Publications Division, Harcourt Brace Jovanovich, P.O. Box 1589, Dallas, Texas 75221-1589. Accounting and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. February 1985, Volume 57, No. 2. Copyright © 1985 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Subscription rate to personnel employed by companies involved with exploration, drilling, or production of oil or gas: one year $18.00, three years $36.00 for North, Central, and South America. Outside North, Central, and South America: one year $38.00, three years $58.00. Subscription rate for all others: $50.00 for one year. Single copy price $3.00. Second class postage paid at Duluth, Minnesota and additional mailing offices. Microfilm copies are available through University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Michigan 48106. Indexed by Applied Science, Technology Index, and the Engineering Index, Inc.

Petroleum Engineer® INTERNATIONAL

The international magazine
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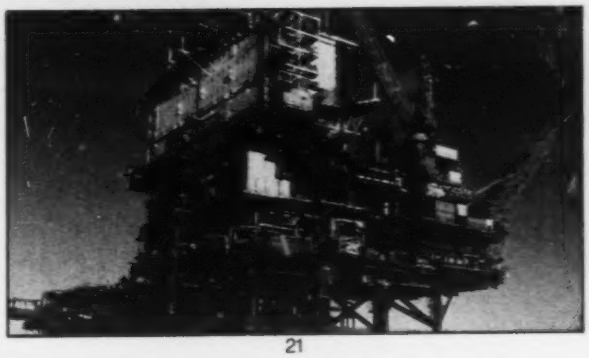
FEBRUARY 1985

NUMBER 2 VOLUME 57



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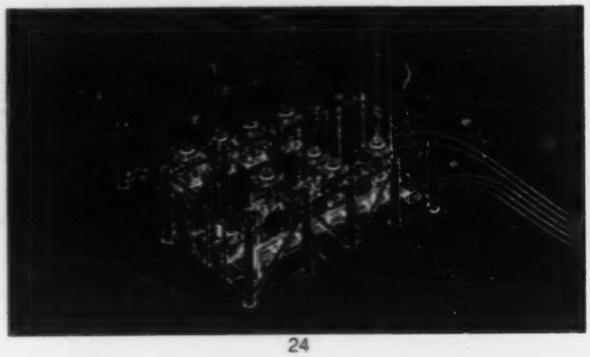

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INTERNATIONAL OFFSHORE ENGINEERING

Beryl B Beats Schedule And Budget 21

by W. B. Bleakley, Editor. Budget goals were more than met through careful and detailed engineering design of all components before contracts were awarded. There was also budgetary assistance from favorable currency exchange trends.

Texaco's Highlander Field Developed Subsea 24

by W. B. Bleakley, Editor. Development of the technology needed to make the field an economic success could lead the way to exploitation of more than 90 additional marginal fields that are known to exist within about 15 miles of existing platforms.

Sonat Challenges Offshore Drilling Frontiers 34

In an exclusive interview, Sonat President William C. O'Malley says that the Gulf of Mexico and the North Sea are the best deepwater drilling markets right now, but other potentially active areas include the Canadian east coast, Alaska, and China.

Model Evaluates Hydraulic Fractures, Determines Reservoir Limit 36

by William Hurst, Houston, Tex. Conformal mapping, an approach considered controversial by many of today's reservoir analysts, is the only approach that will overcome shortcomings and inaccuracies inherent in the finite-difference formulas.

Modern Production Risers, Part 15 44

by George W. Morgan, Engineering Consultant. A test approach seeks to eliminate the correlation problem relating to modeling of wave kinematics and concentrate on verifying the computer program's ability to predict deflections and stresses.

Dry And Wet Systems Operating At Landmark Projects 52

by Derrick Booth, Subsea Data Services. Cormorant's success can be attributed to the resources and determination of the partners and to the qualifying and testing of each component. The Garoupa project has vindicated dry, 1-atm designs.

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ABOUT THE COVER: New generations of offshore rigs are meeting challenges posed by frontier areas. Top and right-hand photos courtesy of Keydril Co. Lower left photo courtesy of Griffin-Alexander Drilling Co.

NEXT MONTH: The annual Deep Well Report in March will be an update on all wells drilled to 15,000 ft or deeper in the U.S. during 1984.

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614 U.S. Deep Wells In 1984, p. 21

Controlling A Landmark Blowout, p. 52

Foreign Deep Drilling Outlook, p. 61

How To Use Elastomer Seals, p. 64

World Rig Locator, p. R-1

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Seasonal Drilling Decline Is Steeper Than Normal

The four weeks covered by this report saw 195 rigs disappear from the Hughes rig count as U.S. rotary rig activity continued its steeper-than-normal seasonal decline during January and March.

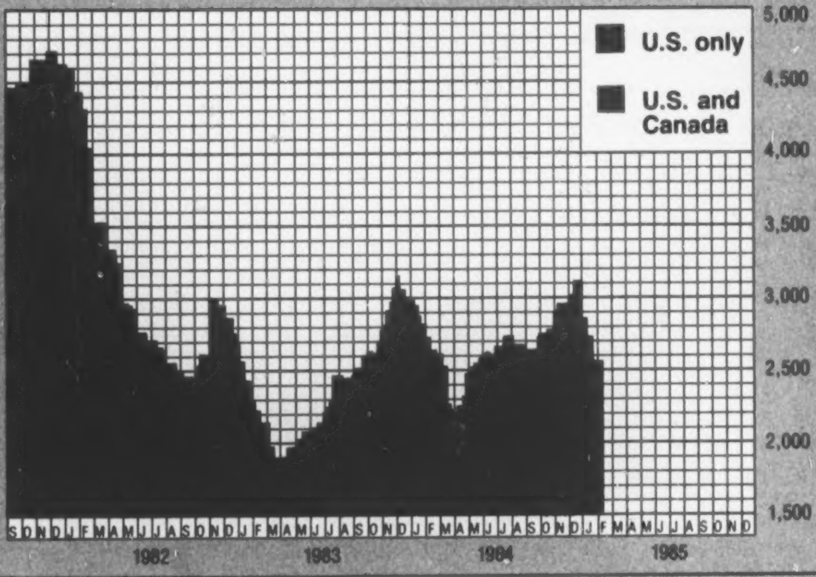
Most observers trace the severity of the decline to uncertainty over crude oil prices and worries about possible enactment of a flat rate tax that could dry up funding of drilling programs from financial sources outside the industry. And, with little likelihood of these question marks disappearing any time soon, chances are the drilling decline will continue into the second quarter of 1985.

Canadian drillers, on the other hand, continue to respond to the improved drilling climate installed by that country's new Conservative government.

Rotary rigs actually making hole in United States & Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Jan. 21, 1985	Jan. 28, 1985	Feb. 4, 1985	Feb. 11, 1985
Alabama				
Land	8	12	13	11
Inland Waters	2	1	1	1
Offshore	4	5	5	5
Total	14	18	19	17
Alaska				
Land	15	16	18	18
Offshore	8	8	7	7
Total	23	24	25	25
Arkansas	30	32	35	31
California				
Land	78	79	77	83
Offshore	19	19	18	18
Total	97	98	95	101
Colorado	58	55	52	52
Florida				
Land	3	5	4	4
Offshore	0	0	1	1
Total	3	5	5	5
Hawaii	1	1	1	1
Idaho	2	2	2	2
Illinois	34	32	37	34
Indiana	7	7	6	6
Kansas	108	105	107	95
Kentucky	5	5	5	5
North Louisiana	43	39	35	32
South Louisiana				
Inland Waters	53	52	46	50
Land	166	166	169	101
Offshore	146	147	147	145
Total	347	342	340	[illegible]
Michigan	35	30	34	36
Mississippi	29	33	35	32
Montana	26	25	18	20
Nebraska	11	12	8	8
Nevada	6	5	5	5
New Mexico	67	60	57	60
New York	11	7	7	8
North Dakota	43	37	34	28
Ohio	55	57	53	54
Oklahoma	294	297	281	281
Oregon	2	2	2	1
Pennsylvania	39	41	41	44
South Dakota	6	7	5	5
Texas				
Offshore	60	56	58	60
Inland Waters	5	5	4	6
Dist. 1-S. Central Tex.	16	14	16	11
Dist. 2-Middle Tex.	43	33	38	41
Dist. 3-Upper Tex.	88	79	84	89
Dist. 4-Lower Tex.	87	85	84	75
Dist. 5-Northeast Tex.	28	24	31	28
Dist. 6-Far Northeast Tex.	66	57	61	48
Dist. 7B-N. Central Tex.	53	49	51	44
Dist. 7C-W. Central Tex.	57	57	52	51
Dist. 8-Far West Tex.	142	149	144	130
Dist. 8A-West Tex.	85	74	76	75
Dist. 9-N. Tex.	60	61	54	43
Dist. 10-Tex. Panhandle	49	46	42	38
Total	816	769	780	764
Utah	47	36	42	41
W. Virginia	32	28	25	24
Wyoming	122	112	99	91
Total U.S.	2,370	2,308	2,271	2,175
Canada	364	360	362	390
Canada – Offshore	12	11	10	11
U.S. and Canada	2,746	2,679	2,643	2,576



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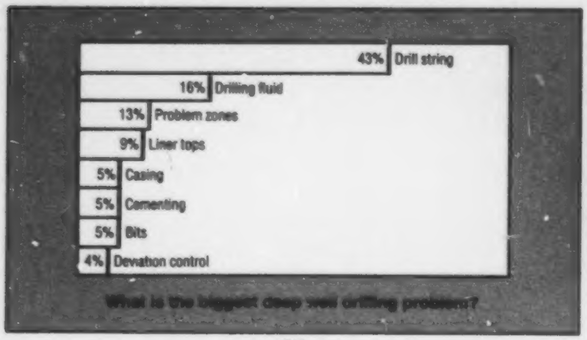
MARCH 1985

NUMBER 3 VOLUME 57



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DEEP WELL REPORT

U.S. Drillers Complete 614 Deep Wells In 1984 21

by Rich McNally, Associate Editor, and Laura Jacobus, Assistant Editor. With a per-well cost of about $5.8 million, 1984 was the most economical deep drilling year since 1981.

Deep Well Map 29

State-by-state data on last year's 614 deep wells include historical trends in average depths, costs, bits, and expenditures for drilling fluids and tubulars. Also included is a list of the 165 companies that operated deep wells in the U.S. during 1984.

Operators Remain Optimistic About Deep Wells 37

In an exclusive survey, operators indicate they are not overly discouraged about deep drilling in the U.S. this year, but they are concerned about continuing technical problems. The survey also found that operators expect things to get better next year.

How To Apply The New API Axial Load Adjustment 40

by Phillip D. Pattillo, Amoco Production Co. The first installment of a two-part report this month defines collapse resistance in tubulars and reviews some fundamental concepts involving multidimensional-stress states.

Deep Apache Well Controlled Successfully 52

by Bob Cudd, Cudd Pressure Control Inc., and Bob Grace, Grace, Shursen, Moore, and Associates. Highlights from the effort include a kill procedure in which more than a million pounds of liquid were pumped into the blowout in 8 minutes.

How A Contractor Views Deep International Drilling Prospects 61

George W. Perry, executive vice president of Loffland Brothers Co., doesn't look for large numbers of deep wells to be drilled in the Eastern Hemisphere or in South America for a number of years. A possible exception is Argentina.

What To Look For In Elastomer Seal Applications 64

by Michael J. Watkins, Battelle Petroleum Technology Center. These seals simplify the design and fabrication of production systems because they can tolerate normal variations in machining, while still giving good seal performance.

World Rig Locator R-1

More than 5,000 rigs, operated by 573 drilling contractors around the world, are listed in an exclusive directory that covers all contract rigs at work or available both on land and offshore. Almost 1,000 of the rigs are offshore.

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ABOUT THE COVER: Deep drilling in the U.S. increased slightly last year, according to the annual survey beginning on page 21. (Cover photo courtesy of Sun Exploration and Production Co.)

NEXT MONTH: The Downhole Tools and Technology Report in April will cover such techniques as gas lift and well treatment.

would need to be enhanced, and arrangements should be made for full in-water surveys."

Another point brought out by Vincent is that cargo pumps of most existing vessels are "unsuited to the new role of storage. They are usually driven by steam turbines and have too high a capacity for loading shuttle tankers.

"In addition, the conventional tanker pump room doesn't lend itself to continuous operation and maintenance, because it must be gas-freed prior to pipe work replacement and other hot-water repairs. This work will be necessary at some point in service life," Vincent said, "so duplication of systems and complete gas-tight division of the pump room (or an additional pump room) would form part of the conversion."

For these and other reasons, Three Quays Marine has determined that building from scratch usually is the better option. "There are exceptions to the rule," Vincent said, "but offshore interests would do well to contemplate the problems surrounding conversion and the current advantages to be secured in today's shipbuilding market."

Scots Study Holography For Underwater Inspection

A team of scientists at the University of Aberdeen is involved in a 3-year research project aimed at the use of underwater holography to examine such major structures as North Sea platforms.

Being funded jointly by the British Technology Group, Conoco (UK) Ltd., and the Science and Engineering Research Council, the $100,000 project is being led by Dr. John Watson of the university's engineering department.

Holography is an optical process that uses laser light to form three-dimensional real or virtual images of an object. It offers a number of advantages over conventional photography in that:

- The image is sharply focused throughout the whole scene.
- An observer studying a hologram can look around foreground obstructions to what lies behind them simply by moving his head.
- A permanent record can be made by exposing a photosensitive plate or paper at any location within a real 3-D image.
- Real or virtual images can be examined by macro or microscopic optical systems.

The Aberdeen researchers plan to develop a practical tool for underwater inspection, archiving, and dimensional analysis. Other uses could include the visualization of thermal currents so as to detect, for example, hot spots and, therefore, possible defects in riser pipes.

One major concern will be to determine experimentally and theoretically the extent to which seawater affects the quality of optical holograms. Practical means for minimizing the effects of light scattering will be devised. And possible recording geometries and their adoption in a prototype holographic camera will be examined. The emphasis throughout is to be on realistic full-scale offshore conditions.

Spill Control Unit Tested In North Sea

The prototype of an offshore oil-spill removal unit was put through preliminary tests in the North Sea recently by Krupp Ruhrorter Schiffswerft GmbH of Duisburg, West Germany.

Called the Model 3,000, the unit's functions were sea tested at a location some 11 miles northwest of Heligoland. On the following day, oil-removal tests were carried out using a controlled spill of fish oil.

The prototype oil removal unit is tested in the North Sea, where it was used to recover a controlled spill of fish oil.

The tug Eisfuchs had towed the 27-ton unit from Cuxhaven to the testing area where it was taken over by the Scharhorn, a German vessel used to combat oil pollution. Pumped-off oil passed through a hose into the 20-Mcf-capacity, heatable tanks of the Scharhorn.

The prototype, developed by the Krupp shipyard in cooperation with the Krupp Research Institute and sponsored by the Federal Ministry for Research and Technology, is said to have come through the trials successfully. Its efficiency currently is being improved in North Sea coastal waters, with the next scheduled offshore testing to be carried out in force 3 to 4 winds.

North Sea Survey Counts 1,300 Divers

The number of divers working in all sectors of the North Sea has doubled in the past 10 years, according to the Association of Offshore Diving Contractors. The latest figures released by the association indicate that 2,235 divers and support personnel were at work during the peak of the summer season in 1984.

AODC also reports that there were 479 remotely operated vehicle operators, manned submersible pilots, and related offshore personnel. And, for the UK alone, there were 664 commercial divers working inland-inshore.

An AODC survey in 1974 turned up 690 working divers. That number increased to 1,140 by 1980, and it stood at 1,344 for the latest survey, in July 1984. AODC says that these numbers include only those divers "at work" and do not include divers on leave, sick, or not working for any other reason. If these divers were included, AODC says that the total figure for 1984 would be in the 3,000-range.

The head count of all relevant diving personnel employed during mid-1984 in the North Sea area breaks down as follows:

• Diving supervisors	243
• Mixed gas or bell divers	700
• Surface-oriented or air divers	644
• Life support technicians	150
• Tenders	88
• Other offshore support personnel	410
• Total	2,235

Increased Capabilities Studied For Jackups

A project aimed at investigating the increased water depth capabilities of existing jackup rigs is being conducted by Veritas Technical Services of Houston.

Tests conducted during the past year indicate that design loads in jackup legs at critical hull-leg connections can be reduced statically by the order of 25% and dynamically by more than 50% when foundation rotational stiffness is accounted for.

In the current project, VTS is studying several selected jackup designs and a range of typical Gulf of Mexico and North Sea environmental conditions. In each case, leg loadings found in the assumption of a pinned spud can connection to the seabed are being compared with those loads found with the more realistic restraints offered by actual soil conditions.

Computer calculations are expected to show how much increase in water depth is possible for each jackup and for each environmental condition without exceeding allowable forces and moments in the legs. A parallel comparison will investigate the effect of dynamics, both on the fatigue life of the unit and on the maximum loads that are induced in the legs when a linearized soil stiffness is accounted for and water depth for operations is increased.

Ocean Drilling Program Underway

A 10-year research mission began last month when the drillship Joides Resolution left the port of Miami on Leg 101, its first official scientific cruise for the Ocean Drilling Program.

A $30-million-a-year project funded by the U.S. National Science Foundation and other participating countries, the program is operated by Texas A&M University, which is responsible for core collection and analyses and for dissemination of results.

Plans call for a series of cruises, each about 8 weeks long, during which the drillship will circle the globe to retrieve cores from beneath the ocean floor in some of the most remote but geologically important areas of the earth.

The objective of the first cruise, Leg 101, is to study the evolution of the Bahamas carbonate platform, a large area of coral reef sediments in the eastern Caribbean. Plans call for seven holes of varying depths to be drilled in three areas of the Bahamas. The drilling system aboard the Joides Resolution (formerly the Sedco/BP 471) can handle 30,000 ft of drill pipe and can drill in up to 27,000 ft of water.

Power Stations For Small Fields

The French oil company Total is studying the possibility of using gas-fueled floating power stations to develop small natural gas fields in the North Sea.

Total engineers say that, for fields with flow rates of less than 5 MMcfd, using the gas to generate electricity offshore in a floating power station for delivery through a seafloor power cable should be more economical than piping the gas ashore, despite the low conversion rate – typically 30% to 50% of available energy.

The engineers estimate that a subsea gas pipeline is twice as costly as laying seabed power cables for distances in excess of 60 miles from shore. To keep costs down further, Total would use surplus oil tankers and existing gas turbine generator systems, which could be fed directly with virtually untreated gas.

The tankers would be moored to single-point mooring buoys containing both gas risers and power cables.

Transponders Recovered From Deep Gulf

Ten transponder assemblies, each weighing 1,800 lb, were recovered recently from more than 1,400 ft of water in the Gulf of Mexico's Mississippi Canyon area.

A special recovery tool, designed by Sonat Subsea Services for use with its Recon IV S remotely operated vehicle (ROV), was used to latch on to the transponders, which had been installed on the seabed 4 years ago as part of a study of seabed motion.

The ROV was deployed in the vicinity of the transponder grouping and, using high resolution sonar, flew directly to each transponder. The vehicle then used its manipulator to attach the lift hook to the transponders, which facilitated their recovery by surface lift equipment. Nine of the transponders reportedly were recovered in fewer than 24 hours.

Garoupa-Cormorant Reprints Available

A combined reprint of "Pioneering Startups At Garoupa And Cormorant" (PETROLEUM ENGINEER INTERNATIONAL, January 1985, p. 30) and "Dry And Wet Systems Operating At Landmark Projects" (PEI, February 1985, p. 52), by Derrick Booth, Subsea Data Services, Houston, Tex., is available free of charge as long as the supply lasts. Contact Dorothy Pate, Energy Publications, P. O. Box 1589, Dallas, Tex. 75221-1589, (214) 691-3911. ■

Photo courtesy of Loffland Brothers Co.

DEEP WELL REPORT

In the pages that follow, PEI reports on 614 deep wells drilled in the U.S. in 1984.

by Rich McNally, *Associate Editor,*
and Laura Jacobus, *Assistant Editor*

	U.S. deep wells*			Alabama land			Alabama offshore		
No. of wells	1982 (1,205)	1983 (577)	1984 (614)	1982 (27)	1983 (21)	1984 (24)	1982 (2)	1983 (5)	1984 (3)
Averages:									
Well depth, ft	17,354	16,974	16,727	16,854	16,191	16,278	21,404	20,554	21,719
Cost/well, (000)	$6,637	$6,095	$5,817	$3,329	$2,110	$2,212	$36,750	$19,406	$20,950
Cost/ft	$382	$353	$348	$198	$130	$136	$1,716	$950	$965
Mud cost/well, (000)	$569	$620	$457	$337	$156	$157	$1,940	$951	$710
Mud cost/ft	$33	$37	$27	$20	$10	$10	$91	$46	$33
Bits/well	37	32	35	19	21	18	107	50	45
Ft/bit	466	618	478	887	974	904	201	432	483
Tubulars/well, tons	NR	644	597	NR	270	301	NR	1,066	1,141
Tubular cost/well, (000)	NR	$1,475	$1,179	NR	$501	$441	NR	$3,507	$3,356
Success ratio	599:1,205	301:577	288:614	14:27	9:21	8:24	2:2	5:5	2:3
Wildcat success ratio	182:536	89:255	68:269	1:9	2:8	1:12	–	2:2	2:3
Development success ratio	417:669	212:322	220:345	13:18	7:13	7:12	2:2	3:3	–
Total costs, (000):									
Mud	$685,569	$357,854	$266,144	$9,109	$3,282	$3,768	$3,879	$4,756	$2,130
Drilling	$6,859,255	$3,026,113	$2,635,521	$70,907	$36,215	$44,301	$66,173	$90,010	$44,610
Completion	$1,118,354	$420,970	$586,030	$18,967	$7,333	$5,568	$7,327	$7,022	$10,050
Total	$7,997,571	$3,516,580	$3,386,232	$89,874	$44,302	$53,088	$73,500	$97,032	$62,850
Total footage	20,911,448	9,794,097	10,270,547	455,058	340,012	390,674	42,808	102,768	65,158

*Deep wells, in this and subsequent tables, are wells drilled to 15,000 ft and deeper

	Alaska land			Alaska offshore			California land		
No. of wells	1982 (2)	1983 (0)	1984 (1)	1982 (0)	1983 (2)	1984 (1)	1982 (4)	1983 (2)	1984 (4)
Averages:									
Well depth, ft	15,575		16,009		17,105	16,400	15,725	17,452	15,851
Cost/well, (000)	$28,100		$8,945		$51,137	$66,930	$9,160	$10,475	$6,703
Cost/ft	$1,804		$497		$3,011	$4,081	$583	$590	$423
Mud cost/well, (000)	$1,506		$763		$976	$1,291	$1,011	$555	$610
Mud cost/ft	$97		$42		$57	$79	$64	$32	$51
Bits/well	61		36		52	45	53	63	67
Ft/bit	255		50		329	364	297	310	237
Tubulars/well, tons	NR		1,653		964	1,065	NR	1,173	252
Tubular cost/well, (000)	NR		$1,964		$1,834	$2,180	NR	$2,500	$590
Success ratio	1:1		0:1		0:2	0:1	2:4	1:2	1:4
Wildcat success ratio	0:1		0:1		0:2	0:1	2:4	0:1	0:3
Development success ratio	1:1		–		–	–	–	1:1	1:1
Total costs, (000):									
Mud	$3,012		$763		$1,952	$1,291	$4,043	$1,110	$2,440
Drilling	$53,100		$8,945		$96,123	$66,930	$27,249	$16,750	$22,100
Completion	$3,100		–		–	–	$9,391	$4,200	$4,712
Total	$56,200		$8,945		$102,274	$66,930	$36,641	$20,950	$26,812
Total footage	31,150		16,009		34,210	16,400	62,898	34,903	63,403

Deep drilling in the U.S. made a modest comeback during 1984 with the completion of 614 wells drilled deeper than 15,000 ft. The previous year's total had been 577.

Total expenditures for drilling and completing 1984's deep wells came to almost $3.4 billion, which breaks out to a per-well cost of about $5.8 million. That is the lowest per-well cost recorded by PETROLEUM ENGINEER INTERNATIONAL's Annual Deep Well Report since 1981. Part of the reason could be that the average depth of 1984's deep wells was 16,727 ft–the shallowest in 20 years. Another reason is the improved drilling economics of recent years. And that is reflected in last year's $348 cost per foot. In 1983, cost per foot had been $353, and in 1982 (deep drilling's high-water year), cost per foot was a record $382.

Despite their shallower average depth, last year's deep wells used more bits than did 1983's. Each bit in 1984 cut an average of 478 ft of hole. That is 140 fewer feet than 1983's bits reached, but it is a 12-ft-per-bit improvement over 1982.

As might be expected with average well depth declining by almost 250 ft, tubular tonnage was down also in 1984. The average deep well last year consumed 597 tons of pipe, a decrease of almost 50 tons per well from 1983. That year was the first in which the Deep Well Report included tubular data.

Success rate for deep exploratory wells during 1984 was only 25%, with 68 of the year's 269 wildcats striking oil or gas–mostly gas. Development drilling, on the other hand, was successful 64% of the time. That is very close to normal for deep development drilling in the U.S. and is in line with 1983's 65% and 1982's 62%. Deep wildcatters, however, usually have better luck than they did in 1984.

Completions, for the purposes of the Annual Deep

	California offshore			Florida			Idaho		
No. of wells	1982 (0)	1983 (0)	1984 (2)	1982 (7)	1983 (9)	1984 (7)	1982 (2)	1983 (0)	1984 (1)
Averages:									
Well depth, ft			17,713	15,908	16,085	16,383	17,070		15,272
Cost/well, (000)			$7,600	$3,561	$3,677	$5,661	$14,032		$4,145
Cost/ft			$429	$224	$219	$346	$822		$271
Mud cost/well, (000)			$400	$185	$121	$113	$811		$305
Mud cost/ft			$23	$12	$8	$7	$48		$20
Bits/well			21	17	18	19	76		63
Ft/bit			844	960	1,063	862	226		242
Tubulars/well, tons			600	NR	447	449	NR		317
Tubular cost/well, (000)			$900	NR	$850	$925	NR		$286
Success ratio			0:2	4:7	4:9	4:7	0:2		0:1
Wildcat success ratio			0:2	0:2	1:6	1:4	0:2		0:1
Development success ratio			–	4:5	3:3	3:3	–		–
Total costs, (000):									
Mud			$800	$1,296	$1,091	$791	$1,622		$305
Drilling			$15,200	$23,275	$28,245	$28,595	$27,040		$4,145
Completion			–	$1,650	$3,850	$9,361	$1,023		–
Total			$15,200	$24,925	$33,094	$38,627	$28,083		$4,145
Total footage			35,426	111,358	144,766	114,68[illegible]	34,140		15,272

	Louisiana land			Louisiana offshore			Mississippi		
No. of wells	1982 (221)	1983 (125)	1984 (135)	1982 (76)	1983 (89)	1984 (70)	1982 (69)	1983 (24)	1984 (29)
Averages:									
Well depth, ft	17,316	17,055	16,493	16,638	16,626	16,404	17,256	16,026	17,420
Cost/well, (000)	$6,760	$4,100	$3,671	$9,393	$9,742	$8,380	$3,525	$1,716	$4,832
Cost/ft	$390	$234	$223	$565	$581	$511	$204	$108	$277
Mud cost/well, (000)	$675	$422	$364	$892	$1,548	$691	$295	$137	$324
Mud cost/ft	$39	$24	$22	[illegible]	$93	$42	$17	$9	$19
Bits/well	34	26	25	[illegible]	32	32	25	22	33
Ft/bit	517	708	660	407	593	513	705	770	528
Tubulars/well, tons	NR	635	525	NR	798	751	NR	341	520
Tubular cost/well, (000)	NR	$1,461	$901	NR	$1,643	$1,425	NR	$449	$1,339
Success ratio	85:221	50:125	49:135	31:76	28:89	22:70	29:69	10:24	16:29
Wildcat success ratio	31:122	16:68	13:65	9:35	8:48	7:39	7:33	1:7	3:13
Development success ratio	54:99	34:57	36:70	22:41	20:41	15:31	22:36	9:17	13:16
Total costs, (000):									
Mud	$149,258	$52,974	$49,164	$52,610	$137,790	$48,370	$20,355	$3,285	$9,396
Drilling	$1,309,458	$434,834	$383,400	$620,302	$761,629	$499,590	$202,698	$33,706	$101,645
Completion	$184,201	$69,493	$70,364	$92,910	$70,469	$85,134	$40,531	$7,443	$24,890
Total	$1,493,867	$512,496	$495,585	$713,885	$867,039	$671,770	$243,229	$41,189	$127,128
Total footage	3,826,838	2,313,892	2,226,535	1,264,464	1,479,722	1,148,311	1,190,678	384,635	505,181

Well Report, are defined as wells that reach total depth of 15,000 ft or more during the calendar year, regardless of whether production equipment has been installed.

Louisiana, with 205 deep wells, maintained its position as the leading deep-well state. Some 70 of Louisiana's deep wells were drilled offshore last year, which means that the Pelican State is in front in that category also. Way in front, because the 70 wells represent 70% of all offshore deep wells drilled in the U.S. last year. Texas accounted for 22 of them and the rest were scattered among Alabama, Alaska, California, and the Atlantic Coast.

Onshore deep wells in Louisiana cost an average of $3.7 million to drill and complete last year. That is $400,000 per well better than the 1983 cost of $4.1 million per well.

Offshore, where most of the deep drilling was in the Cameron-Marsh Island-Eugene Island areas, per-well cost was $8.3 million in 1984. That, also, is an improvement over 1983.

Overall, Louisiana's success rate was not too exciting last year. Only 71 of the state's 205 deep wells were successful. That is a percentage of 34. For the country as a whole, the 1984 success rate was 47%.

The second and third deep drilling states last year were Texas and Oklahoma, and their totals are only three wells apart. Texas drillers completed 131 deep wells during the year, while Oklahoma finished the year with 128, which is the lowest total for the Sooner State since 1978.

As indicated earlier, 22 of the Texas deep wells were drilled offshore, with the most popular deep drilling area being Matagorda Island, offshore Calhoun County. Costs are high, with the average deep well offshore Texas costing $11 million. That represents a decline,

	Texas land			Texas offshore			Utah		
No. of wells	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] (7)	[illegible]
Averages:									
Well depth, ft	17,580	[illegible]	17,230	16,518	16,573	16,197	17,075	16,996	16,085
Cost/well, ($000)	$6,073	[illegible]	$5,392	$13,017	$14,633	$11,076	$10,242	$10,297	$5,082
Cost/ft	$346	[illegible]11	$313	$788	$885	$684	$600	$604	$311
Mud cost/well, ($000)	$565	$527	$503	$1,185	$923	$740	$940	$1,044	$415
Mud cost/ft	$32	$30	$29	$70	$56	$46	$49	$59	$26
Bits/well	34	32	30	45	44	39	37	76	68
Ft/bit	514	513	579	368	386	415	186	237	237
Tubulars/well, tons	NR	719	680	NR	1,000	732	NR	520	451
Tubular cost/well, ($000)	NR	$1,700	$1,300	NR	$3,370	$1,004	NR	$1,274	$647
Success ratio	96:194	58:98	55:108	1:16	6:23	5:22	3:14	3:7	10:25
Wildcat success ratio	40:112	29:50	20:63	1:11	2:10	2:13	1:11	0:4	1:9
Development success ratio	[illegible]	[illegible]	[illegible]	[illegible]	4:13	3:9	2:3	3:3	9:16
Total costs, ($000):									
Mud	$107,640	$47,414	$54,323	$18,476	$21,281	$16,476	$11,764	$7,311	$10,375
Drilling	$886,282	$412,264	$431,422	$196,314	$304,014	$191,664	$130,538	$69,150	$117,525
Completion	$184,352	$72,516	$107,800	$9,958	$27,751	$36,870	$12,848	$2,725	$12,996
Total	$1,178,075	$494,904	$539,725	$208,276	$333,573	$243,673	$143,385	$72,078	$130,550
Total footage	2,4[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	239,100	118,986	402,116

	Wyoming			Offshore Atlantic Coast		
No. of wells	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Averages:						
Well depth, ft	17,127	17,900	15,980			16,570
Cost/well, ($000)	$10,300	$9,582	$7,538			$30,250
Cost/ft	$601	$535	$471			$1,793
Mud cost/well, ($000)	$921	$733	$561			$335
Mud cost/ft	$54	$40	$35			$20
Bits/well	71	64	72			24
Ft/bit	243	346	222			709
Tubulars/well, tons	NR	644	605			585
Tubular cost/well, ($000)	NR	$1,822	$1,161			$1,800
Success ratio	22:43	9:21	10:27			0:2
Wildcat success ratio	8:24	3:14	4:9			0:2
Development success ratio	14:19	6:7	[illegible]			–
Total costs, ($000):						
Mud	$39,600	$15,397	$15,147			$669
Drilling	$362,792	$179,071	$165,942			$60,500
Completion	$58,434	$20,324	$26,480			–
Total	$442,913	$200,585	$203,526			$60,500
Total footage	[illegible]	[illegible]	[illegible]			33,140

PEI's deep well map provides another look at 1984's key statistics and a list of operators and contractors (pp. 29-32).

however, of almost $3.5 million per well from costs reported in 1983. Nevertheless, the success rate offshore Texas last year was only 22%.

Onshore, Texans had more luck, with just over half of the year's deep wells being completed as producers. As usual, deep wells were sunk all across Texas, from East Texas to the Gulf Coast and South Texas and out to West Texas and the Panhandle. Their average cost was almost $5.4 million, which is about half a million dollars less than the state's deep land wells cost in 1983.

Oklahoma's 128 deep wells were drilled throughout the Anadarko Basin, from south-central Oklahoma to the Panhandle. They cost just under $4 million apiece, and 62% of them were successful. Wildcatters struck pay in 10 out of 20 attempts, and development drillers were successful with 69 of 108 deep wells.

The total number of Oklahoma deep wells last year was a decline of 16 from 1983. And it is a 365-well decline from 1982, which was when Oklahoma drillers accounted for more than 40% of all the deep wells drilled in the U.S. The reason, of course, is today's so-called gas bubble and the resulting depressed prices producers are receiving for natural gas.

Mississippi's deep wells were drilled mostly in the south-central region of the state, where drillers are looking for the Cotton Valley formation. Their success rate, for development wells, at least, has been pretty impressive. Some 13 of 16 deep development wells in Mississippi were completed as producers last year. Of 13 wildcats, only three found success.

Wyoming and Alabama tied for fifth place with 27 deep wells apiece. Three of Alabama's wells were offshore, in Mobile Bay, where the deep Norphlet formation is starting to attract a lot of interest. Not counting Alaska and the deep Atlantic Coast, however, Mobile Bay drilling is the most expensive in the U.S. Wells drilled there in 1984 cost more than $20 million apiece. One reason is the strict environmental standards that operators must meet. Another is the high temperatures and pressures encountered in deep

Contrasting Marks in Ultradeep Drilling

Ultradeep drillers set two records in the U.S. last year. For one thing, their completion total was the lowest since 1969, which was the first year in which ultradeep totals were broken out separately by PETROLEUM ENGINEER INTERNATIONAL's computerized Deep Well Report. On the positive side, the average depth of 1984's ultradeep wells (at 22,345 ft) is the deepest ever.

Deepest-well-of-the-year honors go to Exxon U.S.A.'s No. 1 State University FD well in Pecos County, Texas. Drilled to total depth of 25,285 ft, its completion in 1984 marked the fourth consecutive year in which a Pecos County well was the year's deepest. A wildcat, the Exxon well was completed as a gas producer.

The average cost for an ultradeep well in 1984 was just over $11 million, which comes to about $500 per foot. Success rate for superdeep wells (at 53%) was not too bad last year. It was higher than 1982's 41%, but lower than in 1983.

Interestingly, 1984's 28 ultradeep wells were evenly divided between the wildcat and development categories. Three years ago, more than 60% of the country's 20,000-ft wells had been wildcats. That is obviously a reflection of the changing economics of the natural gas business. It is hard to justify 20,000-ft wildcats with the price of gas in the $3/Mcf-range.

Texas led all states in ultradeep wells last year with nine—four of them in Pecos County. Oklahoma and Louisiana each accounted for six 20,000-ft wells, with two of Louisiana's being completed offshore.

Although comprising only 18% of the ultradeep total for the year, the five of last year's ultradeep tests that were drilled offshore accounted for 28% of the $299 million spent for ultradeep drilling during 1984. Offshore drilling can usually be counted on to be more expensive than onshore drilling, but the three wells in the environmentally sensitive Mobile Bay area made total costs even higher than usual.

	U.S. ultradeep wells*			Land ultradeep wells			Offshore ultradeep wells		
No. of wells	1982 (132)	1983 (37)	1984 (28)	1982 (129)	1983 (31)	1984 (23)	1982 (3)	1983 (6)	1984 (5)
Averages:									
Well depth, ft	21,617	21,674	22,345	21,644	21,601	22,538	21,236	20,724	21,460
Cost/well, (000)	$11,242	$9,967	$11,332	$12,625	$9,485	$10,210	$29,930	$14,606	$16,944
Cost/ft	$520	$461	$507	$583	$439	$453	$1,409	$705	$790
Mud cost/well, (000)	$1,068	$820	$906	$1,222	$883	$968	$2,007	$774	$599
Mud cost/ft	$49	$38	$41	$57	$41	$43	$95	$37	$28
Bits/well	60	49	51	73	54	53	95	42	41
Ft/bit	558	552	438	297	400	425	224	539	523
Tubulars/well, tons	NR	964	1,084	NR	998	1,108	NR	886	966
Tubular cost/well, (000)	NR	$2,376	$2,822	NR	$2,879	$2,751	NR	$2,492	$3,356
Success ratio	55:132	23:37	15:28	48:129	19:31	13:23	1:3	4:6	2:5
Wildcat success ratio	24:82	7:16	4:14	24:81	5:12	2:10	0:3	2:4	2:4
Development success ratio	31:50	16:21	9:14	24:48	14:19	11:13	1:2	2:2	0:1
Total costs, (000):									
Mud	$140,939	$30,354	$24,468	$134,987	$25,296	$19,929	$5,952	$5,058	$3,539
Drilling	$1,316,263	$333,044	$241,198	$1,226,980	$239,626	$173,046	$89,283	$93,418	$68,152
Completion	$166,926	$27,111	$49,764	$159,599	$24,089	$41,065	$7,327	$3,022	$8,699
Total	$1,483,931	$368,764	$298,868	$1,387,321	$272,324	$214,149	$96,610	$96,440	$84,719
Total footage	2,853,430	801,936	625,661	2,789,554	676,781	518,363	63,876	125,155	107,298
			Location and number of wells	Louisiana (20) Mississippi (7) Oklahoma (67) Texas (31) Utah (1) Wyoming (3)	Louisiana (4) Oklahoma (8) Texas (15) Wyoming (4)	Louisiana (4) Mississippi (4) Oklahoma (6) Texas (9)	Alabama (2) Florida (1)	Alabama (4) Louisiana (2)	Alabama (3) Louisiana (2)

*Ultradeep wells are wells drilled to 20,000 ft and deeper

	Montana			New Mexico			Oklahoma		
No. of wells	1982 (0)	1983 (1)	1984 (1)	1982 (28)	1983 (13)	1984 (22)	1982 (493)	1983 (144)	1984 (128)
Averages:									
Well depth, ft		16,600	17,774	15,739	15,664	15,554	17,603	17,159	17,121
Cost/well, (000)		$9,700	$10,000	$3,293	$2,426	$2,453	$6,193	$4,520	$3,987
Cost/ft		$584	$563	$209	$155	$158	$352	$261	$233
Mud cost/well, (000)		$640	$500	$268	$188	$209	$505	$396	$362
Mud cost/ft		$39	$28	$17	$12	$13	$29	$23	$21
Bits/well		123	106	22	21	19	39	33	32
Ft/bit		135	168	715	806	818	446	549	535
Tubulars/well, tons		281	538	NR	384	354	NR	553	569
Tubular cost/well, (000)		$420	NR	NR	$784	$657	NR	$1,204	$1,256
Success ratio		0:1	0:1	17:28	11:13	12:22	290:493	106:144	79:128
Wildcat success ratio		0:1	0:1	12:18	4:5	4:7	68:145	21:29	10:20
Development success ratio		–	–	5:10	7:8	8:15	222:348	85:115	60:108
Total costs, (000):									
Mud		$640	$500	$7,512	$2,441	$4,596	$249,168	$57,010	$46,336
Drilling		$9,700	$10,000	$78,485	$22,181	$38,236	$2,570,424	$527,341	$400,768
Completion		–	–	$13,432	$9,004	$11,595	$473,200	$118,665	$176,210
Total		$9,700	$10,000	$92,199	$31,541	$49,839	$3,053,287	$650,933	$577,336
Total footage		16,600	17,774	440,685	203,638	341,966	8,678,458	2,470,827	2,191,443

(continued on page 35)

DEEP WELL

There were 165 deep w

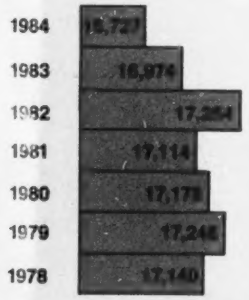
Alatex Energy Inc.
Amarex Inc.
Amerada Hess Corp.
Aminoil USA Inc.
Amoco Production Co.
An-Son Corp.
Anadarko Production Co.
The Anschutz Corp.
Apache Corp.
APD Oil
ARCO Alaska Inc.
ARCO Oil & Gas Co.
Barrick Exploration
Berexco
Bishop Petroleum Inc.
Bow Valley Resource Services Ltd.
C. F. Braun & Co.
Bright & Co.
Brock Exploration Corp.
BTA Oil Producers
Bunker Exploration Co.
Burk Royalty Co.
W. T. Burton
Cashco Oil Co.
Cenergy Exploration Co.
Champlin Petroleum Co.
Chase Exploration Corp.
Chevron USA Inc.
Cimmaron Petroleum Corp.
Cities Service Oil & Gas Co.
CNG Producing Co.
Coastal Corp.
Cockrell Oil Corp.
Columbia Gas Development Corp.
Conoco Inc.
Conquest Energy
Corpus Christi Oil & Gas Co.
Cotton Petroleum Corp.
Edwin L. Cox and Berry R. Cox
Cummins & Walker Oil Co. Inc.
Davis Oil Co.
Diamond Shamrock Exploration Co.
Dyco Petroleum Corp.
Eason Oil Co.
El Paso Exploration Co.
Enstar Corp.
Entex Petroleum Inc.
Exchange Oil & Gas Corp.
Exxon Co. U.S.A.
Federated Energy Corp.
First Energy Corp.
Florida Exploration Co.
Forest Oil Corp.
Gadsco Inc.
Getty Oil Co.
The GHK Companies
Grace Petroleum Corp.
Great Southern Oil & Gas Co. Inc.
Gulf Oil Corp.
H G & G Inc.
Michel T. Halbouty Energy Co.
Hamilton Brothers Oil Co.
Hanson Minerals
H. C. Harbaugh
Harkins & Co.
Hawthorne Oil & Gas Corp.
Helmerich & Payne Inc.
Hershey Oil Corp.
Highland Resources Inc.
Hilliard Oil & Gas Inc.
HNG Oil Co.
Huffco Petroleum Corp.
Hunt Oil Co.
Husky Oil Co.
Indrex Inc.
Inexco Oil Co.
Jaytex Oil & Gas
Jenkins Oil & Gas
Kaiser-Francis Oil Co.
Ladd Petroleum Corp.
Latham Resources Corp.
Lea Exploration Co.
Lear Petroleum Exploration
Leede Oil & Gas Inc.

DEEP WELL CC

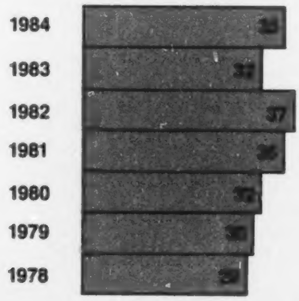
The following 1
(reported by the ope
drilled the wells analyzed in

A & P Drilling Co. Inc.
A & P Marine
Abbott Brothers
Anadarko Production
Apollo Drilling & Exploration
Ard Drilling Co. Inc.
Arden Drilling Co.
Atco Drilling Inc.
Atwood Oceanics Inc.
Baker & Taylor Drilling Co.
Bay Drilling Corp.
Bokenkamp Drilling Co. Ltd.
Bomac Drilling
Brinkerhoff-Signal Inc.
Cactus Drilling Co.
Caliber Energy
Chapman Drilling
Chase Drilling Co.
Chiles Drilling Co.
Cliffs Drilling Co.
Continental
Cothrum Drilling Co.
CRC Mallard Inc.
Culver Drilling
Delex Drilling
Delta Drilling Co.
Diamond M Land Drilling
Dixilyn-Field Drilling Co.
Dorchester Drilling Inc.
Dual Drilling Co.
Eason Oil Co.
Eljay Drilling Corp.
Exeter Drilling Co.
Flournoy Drilling Co.
Fluor Drilling
Forex-Neptune
Forwest Inc.
France Drilling
Fred Martin Drilling
Glendel Drilling Co. Inc.
Goldrus Drilling Co.
Grace Drilling Co.
Grace Miller Drilling
Grace-Glasscock Drilling
Grey Wolf Drilling Co.
Gulf Oil Exploration &
  Production
Harkins & Co.
Helmerich & Payne Inc.
Henley Drilling Co.
Hillin Drilling Co.
Horizon Drilling Co.
Huthnance Drilling Co.
Intrepid Drilling Corp.
J.F.P. Well Service Inc.
JHJ Drilling Co.
Johnson-Bates
  Drilling Co. Inc.
Justiss Oil Co. Inc.
K-Drilling
Keyes Offshore Inc.
Lanex Inc.
Latshaw Drilling Co.
Loffland Brothers Co.
Lord Drilling Co. Inc.
R. L. Manning Co.
Marine Drilling Co.
Marlin Drilling Co. Inc.

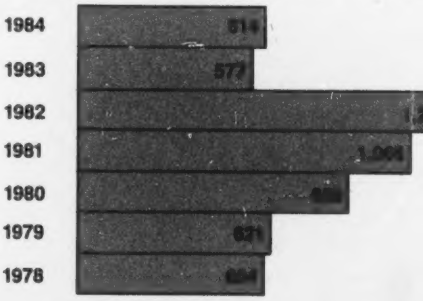
AVERAGE WELL DEPTH



AVERAGE BITS PER WELL



NUMBER OF WELLS 15,000 FT & BEL



PERATORS

ell operators in 1984.

LGS Exploration Inc.
Lincoln Rock Corp.
Linmar Energy Corp.
The Louisiana Land
 and Exploration Co.
Mack Oil Co.
Marathon Oil Co.
Marshall Oil
May Petroleum Inc.
McCormick Oil and Gas Co.
McMoRan Exploration Co.
McMoRan-Freeport Oil Co.
Mobil Oil Corp.
Monsanto Oil Co.
Moore McCormack Energy Inc.
Moran Exploration Inc.
Mosbacher Production Co.
Myco Industries
Napeco Inc.
c. Nareco Corp.
Navajo Drilling

Newport Petroleums Inc.
Nova Petroleum Corp.
O I L Energy
Oxley Petroleum
Patrick Petroleum Co.
PCX Corp.
Pel-Tex Oil Co. Inc.
Pelto Oil Co.
Pennzoil Exploration
 and Production Co.
Phillips Petroleum Co.
Placid Oil Co.
Pogo Production Co.
Quintana Petroleum Corp.
C. Louis Renaud
Rio Bravo Oil Co.
RK Petroleum Corp.
Rosewood Resources
Rosson-Layman
Rutherford Oil Corp.
Samedan Oil Corp.

Sandefer Oil & Gas Inc.
Sanguine Ltd.
Santa Fe Energy Co.
Santa Fe Minerals Inc.
Santa Fe-Andover Oil Co.
Scandrill Oil
Seneca Resources Corp.
Shell Oil Co.
Donald C. Slawson Oil Producer
Sohio Petroleum Co.
Sonat Exploration Co.
Southland Royalty Co.
Southport Exploration Inc.
Spartan Petroleum Corp.
Staley Oil Co.
The Stone Petroleum Corp.
Sun Exploration
 & Production Co.
Superior Oil
Tee Operating Co.
Tenneco Oil Co.

Terra Resources Inc.
Texaco Inc.
Texas Crude Oil Inc.
Texas Gas Exploration Corp.
Texas West Oil & Gas Corp.
Texoma Production
Toce Oil Co. Inc.
Tomlinson Oil Co. Inc.
Transco Exploration Corp.
Trigg Drilling Co.
True Oil Co.
TXO Production Corp.
Unocal
W.W.F. Oil Corp.
Wagner & Brown
Ward Petroleum Corp.
Westland Oil Development Corp.
Williams Exploration Co.
C. W. Williams
Woods Petroleum Corp.
Yates Petroleum Corp.

TRACTORS

contractors
ting companies)
l's 1984 deep well survey.

averick Drilling Co. Inc.
ontgomery Drilling Co.
oran Brothers Inc.
W. Moran Drilling Co. Inc.
urco Drilling Corp.
avajo Drilling Co.
H. Neely
chols Drilling Corp.
cklos Drilling Co.
cor Drilling Co.
oble Drilling Corp.
ordrill International Inc.
owotny & Conley Drilling
cean Drilling & Exploration
neok Drilling Co.
rker Drilling Co.
rker Well Service Inc.

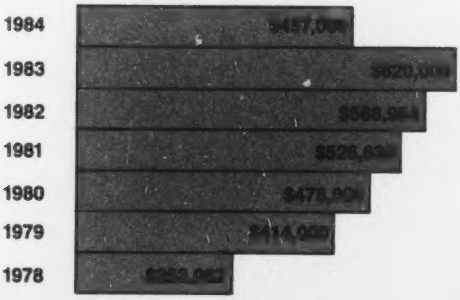
Penrod Drilling Co.
Petro-Tex Drilling Co.
Pilgrim Drilling
Pool Arctic Alaska
Portal Drilling
PRC Drilling Co.
Pruet Ram Co.
Quarles Drilling Corp.
Ratliff Drilling Co.
Reliant Drilling Co.
Resource Drilling Inc.
Richards Drilling Co.
Richards-Armstrong Inc.
Rio Grande Drilling Co.
Rowan Drilling–U.S.
Rowan Drilling International
Salen Offshore Co.

Santa Fe Drilling Co.
Sedco Inc.
Sharp Drilling Co. Inc.
Shelby Drilling
Shell Oil Co.
Sonat Offshore Drilling Inc.
South Texas Drilling &
 Exploration Inc.
Stamper Drilling
Standard Drilling & Well
 Service
Sun Drilling
Teledyne Movible Offshore Inc.
Temple Drilling Co.
Tesoro Drilling Co.
Texaco Inc.
TransAmerica Drilling Co. Inc.

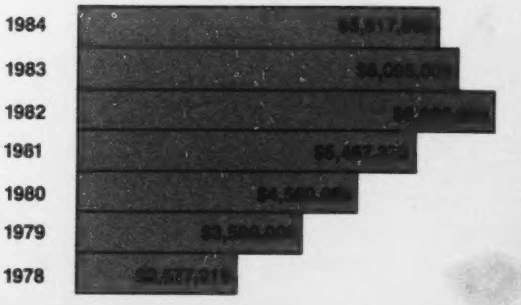
Transcontinental Drilling Co.
Transworld Drilling Co.
Tri-Service Drilling Co.
Trigg Drilling Co.
Two "R" Drilling Co. Inc.
U. S. Drilling
Unit Drilling & Exploration Co.
WellTech Inc.
Westburne Drilling Inc.
Western Drilling Co.
Western Oceanic Inc.
Wheless Drilling Co.
Willbros Drilling Inc.
Wilson Brothers Drilling Co.
Fred Wilson Drilling Co. Inc.
Zapata Off-Shore Co.

W

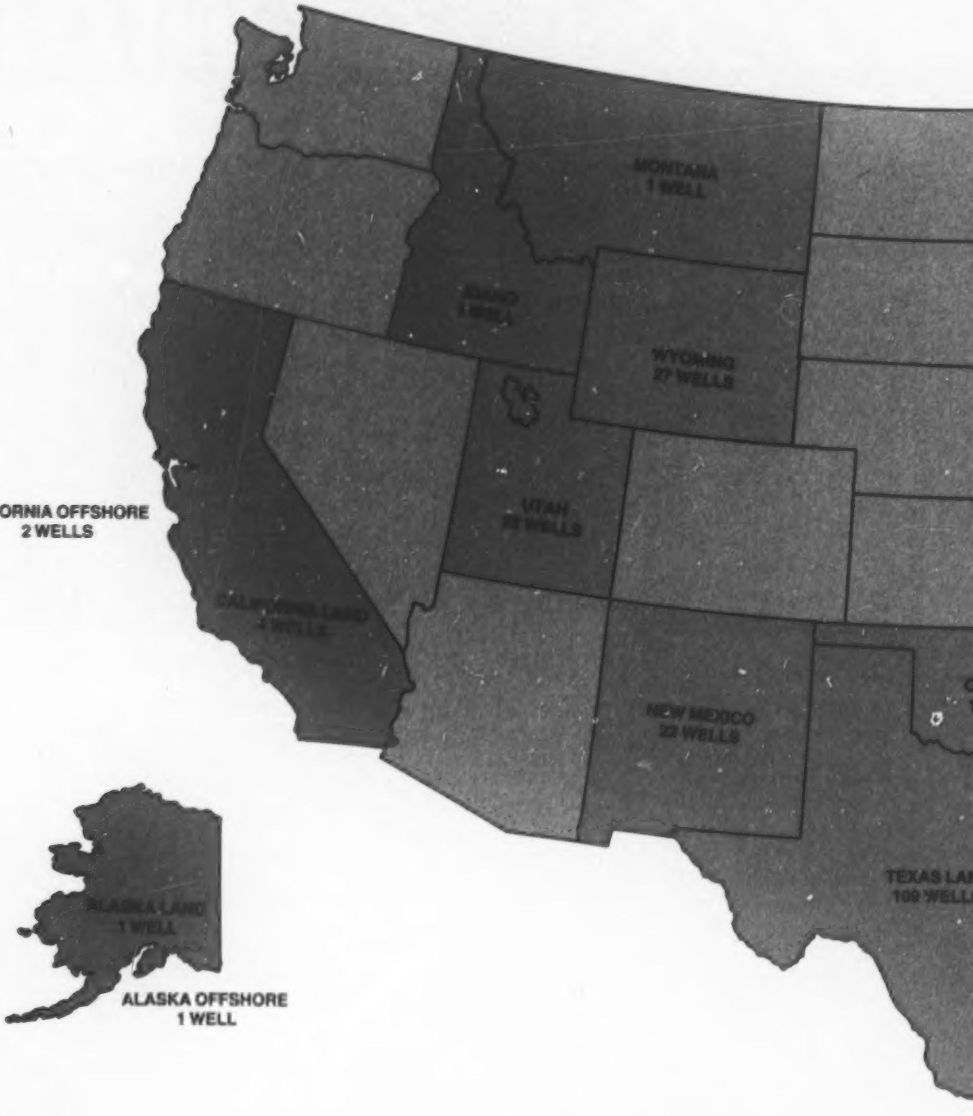
AVERAGE MUD COST PER WELL



AVERAGE COST PER WELL



1984 U.S. deep drilli


MONTANA
1 WELL
IDAHO
1 WELL
WYOMING
27 WELLS
UTAH
CALIFORNIA OFFSHORE
2 WELLS
CALIFORNIA LAND
4 WELLS
NEW MEXICO
22 WELLS
TEXAS LA
109 WELL
ALASKA LAND
1 WELL
ALASKA OFFSHORE
1 WELL

MONTANA
1 well
Depth 17,774
Cost $10,000,000
Mud $500,000
Tubulars NR
Bits 106

IDAHO
1 well
Depth 15,272
Cost $4,145,000
Mud $305,000
Tubulars $286,000
Bits 63

CALIFORNIA OFFSHORE
2 wells
Avg. depth 17,713
Avg. cost $7,600,000
Avg. mud $400,000
Avg. tubulars $900,000
Avg. bits 21

CALIFORNIA LAND
4 wells
Avg. depth 15,851
Avg. cost $6,703,000
Avg. mud $810,000
Avg. tubulars $590,000
Avg. bits 67

ALASKA OFFSHORE
1 well
Depth 16,400
Cost $66,930,000
Mud $1,291,000
Tubulars $2,180,000
Bits 45

ALASKA LAND
1 well
Depth 18,009
Cost $8,945,000
Mud $763,000
Tubulars $1,964,000
Bits 36

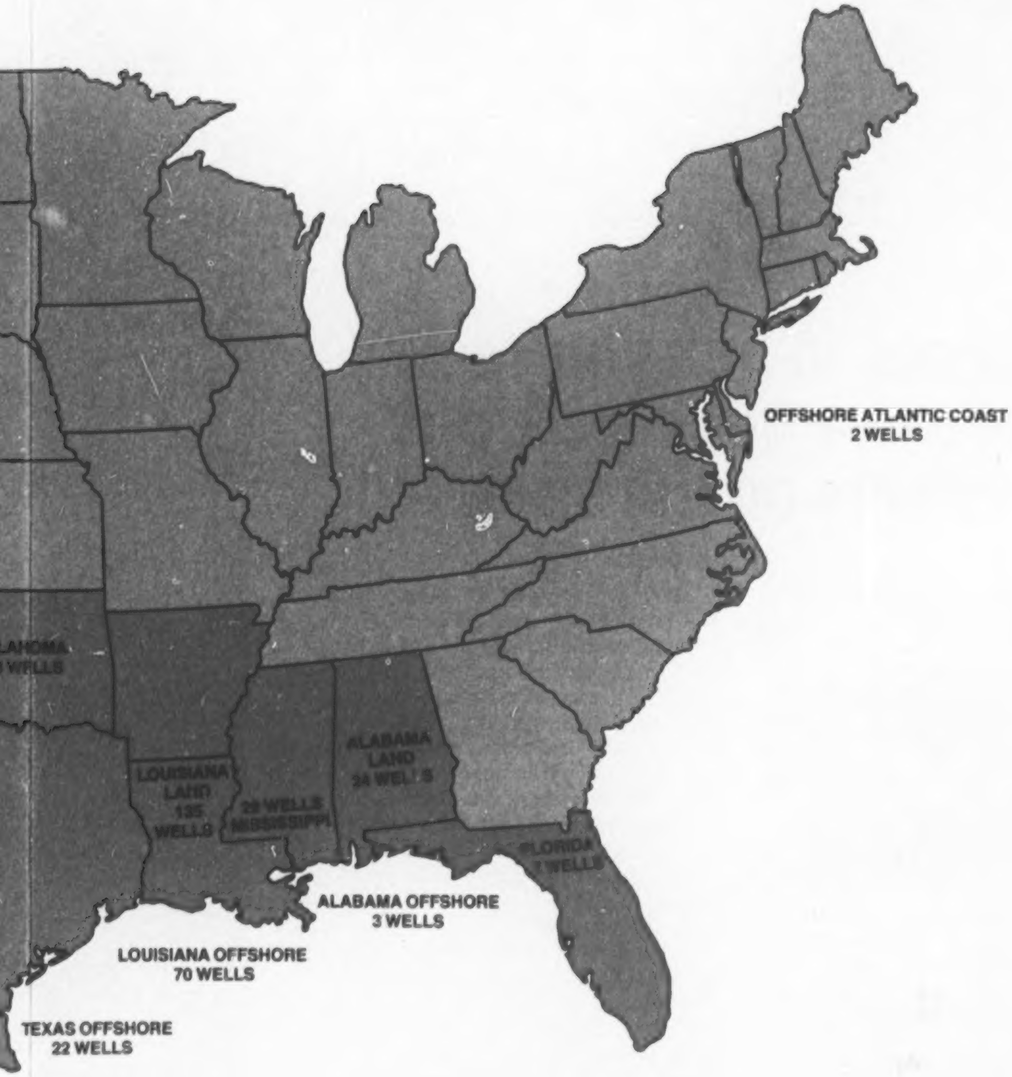
TEXAS OFFSHORE
22 wells
Avg. depth 16,197
Avg. cost $11,076,000
Avg. mud $749,000
Avg. tubulars $1,804,000
Avg. bits 39

TEXAS LAND
109 wells
Avg. depth 17,238
Avg. cost $5,392,000
Avg. mud $503,000
Avg. tubulars $1,359,000
Avg. bits 36

LOUISIANA OFFSH
70 wells
Avg. depth 16,404
Avg. cost $8,380,000
Avg. mud $691,000
Avg. tubulars $1,425,00
Avg. bits 32

LOUISIANA LAND
135 wells
Avg. depth 16,493
Avg. cost $3,671,000
Avg. mud $364,000
Avg. tubulars $901,000
Avg. bits 25

ng 614 deep wells


OFFSHORE ATLANTIC COAST
2 WELLS
LAHOMA
WELLS
LOUISIANA
LAND
135
WELLS
29 WELLS
MISSISSIPPI
ALABAMA
LAND
24 WELLS
FLORIDA
7 WELLS
ALABAMA OFFSHORE
3 WELLS
LOUISIANA OFFSHORE
70 WELLS
TEXAS OFFSHORE
22 WELLS

RE

ALABAMA OFFSHORE
3 wells
Avg. depth 21,719
Avg. cost $20,950
Avg. mud $710,000
Avg. tubulars $3,356,000
Avg. bits 45

OFFSHORE ATLANTIC COAST
2 wells
Avg. depth 16,870
Avg. cost $1,793,000
Avg. mud $335,000
Avg. tubulars $1,600,000
Avg. bits 24

UTAH
25 wells
Avg. depth 16,085
Avg. cost $5,002,000
Avg. mud $415,000
Avg. tubulars $647,000
Avg. bits 68

WYOMING
27 wells
Avg. depth 15,990
Avg. cost $7,538,000
Avg. mud $561,000
Avg. tubulars $1,151,000
Avg. bits 72

ALABAMA LAND
24 wells
Avg. depth 16,278
Avg. cost $2,212,000
Avg. mud $157,000
Avg. tubulars $441,000
Avg. bits 18

FLORIDA
7 wells
Avg. depth 16,383
Avg. cost $5,661,000
Avg. mud $113,000
Avg. tubulars $925,000
Avg. bits 19

NEW MEXICO
22 wells
Avg. depth 15,554
Avg. cost $2,453,000
Avg. mud $209,000
Avg. tubulars $657,000
Avg. bits 19

OKLAHOMA
128 wells
Avg. depth 17,121
Avg. cost $3,987,000
Avg. mud $362,000
Avg. tubulars $1,256,000
Avg. bits 32

MISSISSIPPI
29 wells
Avg. depth 17,420
Avg. cost $4,832,000
Avg. mud $324,000
Avg. tubulars $1,339,000
Avg. bits 33

-32

Wells completed 15,000 ft and below by years of completion

Year	No. of wells	Exploratory	Total producers	Average bits/well	Mud costs average	Well costs average	Average cost/ft	Total footage drilled	Average ft/well	New records	
										Deepest well	Deepest producer
1938	1	1	1	–	–	–	–	15,004	–	15,004	13,175
1944	1	1	0	–	–	–	–	15,279	–	15,279	–
1945	3	3	0	222	–	–	–	47,245	15,748	16,655	–
1946	1	1	1	–	–	–	–	15,452	–	–	–
1947	8	8	1	181	$ 24,000	$ 570,000	$ 35.87	127,128	15,891	17,823	13,904
1948	7	6	2	303	28,000	551,000	34.34	112,329	16,047	–	14,255
1949	11	8	5	199	64,000	534,000	32.52	180,631	16,421	20,521	15,530
1950	5	2	3	181	63,000	557,000	36.72	78,565	15,713	–	–
1951	12	5	6	116	54,000	527,000	33.56	189,864	15,822	–	–
1952	25	17	9	138	66,000	549,000	34.77	396,850	15,874	–	16,012
1953	25	14	20	159	75,000	729,000	44.79	402,936	16,177	21,482	17,895
1954	56	30	31	117	92,000	651,000	40.87	892,021	15,929	–	–
1955	80	63	43	87	116,000	649,000	40.09	1,276,560	15,957	22,559	–
1956	155	77	78	89	122,000	683,000	42.18	2,510,050	15,988	–	20,745
1957	185	114	89	89	121,000	743,000	46.25	2,987,841	16,064	–	–
1958	197	136	100	79	107,000	692,000	43.18	3,171,762	16,019	–	–
1959	228	142	119	71	83,000	650,000	40.48	3,660,857	16,056	25,340	–
1960	242	134	136	66	86,000	675,000	42.50	3,858,622	15,945	–	–
1961	243	84	153	63	81,000	614,000	38.07	3,918,324	16,124	–	–
1962	254	74	130	63	92,000	654,000	38.00	4,414,300	17,000	–	–
1963	271	96	128	52	97,246	696,000	42.85	4,401,363	16,241	–	21,410
1964	308	141	150	51	95,507	653,256	39.33	5,115,938	16,610	–	21,793
1965	330	117	156	59	90,160	610,784	36.50	5,522,541	16,735	–	22,098
1966	388	130	149	71	84,007	727,996	42.20	6,693,785	17,252	–	22,483
1967	402	142	192	67	96,375	762,676	45.29	6,769,371	16,839	–	–
1968	406	150	194	65	100,305	889,991	52.13	6,931,232	17,072	–	22,790
1969	389	116	206	54	101,529	866,349	50.91	6,619,216	17,016	–	–
1970	381	168	189	54	117,874	999,343	57.87	6,579,870	17,270	25,600	–
1971	417	149	210	60	146,049	949,959	54.81	7,227,444	17,332	–	–
1972	506	230	290	44	103,507	919,484	54.21	8,583,278	16,963	30,050	22,548
1973	506	213	272	38	122,067	1,107,059	63.58	8,810,918	17,413	–	–
1974	446	220	258	37	168,426	1,456,522	84.08	7,726,058	17,323	31,441*	–
1975	410	191	190	37	197,279	1,901,017	109.80	7,098,330	17,313	–	–
1976	439	186	255	33	214,276	2,112,509	121.98	7,603,041	17,319	–	–
1977	476	233	233	30	221,490	2,205,954	127.58	8,230,040	17,290	–	26,566**
1978	604	306	288	29	253,082	2,577,216	150.60	10,352,560	17,140	–	–
1979	621	248	279	30	414,000	3,599,000	208.68	10,709,644	17,246	–	–
1980	859	433	462	32	478,906	4,560,090	265.47	14,755,480	17,178	–	–
1981	1,066	530	598	35	526,638	5,467,372	313.01	18,243,075	17,114	–	–
1982	1,205	536	600	37	568,954	6,636,988	382.45	20,911,440	17,354	–	–
1983	577	255	301	32	620,000	6,095,000	353.40	9,794,007	16,974	–	–
1984	**614**	**345**	**288**	**35**	**$457,000**	**$5,817,000**	**$348.00**	**10,270,547**	**16,727**	–	–

*This is the all-time record depth hole, completed in Oklahoma's Anadarko Basin in May 1974 by Lone Star Producing Co.

**Chevron USA established the record depth production mark in 1977 with completion of No. 1 Ledbetter in Wheeler County, Texas. Gage was 2,500,000 cfd from the Arbuckle at 23,427-26,518 ft.

Mobile Bay wells. Two of the three wells drilled in the Bay last year were successful, however. And all of them were wildcats.

Onshore, except for a well in the Tuscaloosa area, Alabama deep drillers opted to do most of their work in southwestern counties surrounding Mobile. Wells there were much more economical than they were offshore last year, at just over $2.2 million apiece.

All of Wyoming's wells were onshore, of course, and 70% of them were successful. At almost 1,600-ft shallower average depth than in 1983, Wyoming's 1984 deep wells cost an average of just over $7.5 million to drill and complete. That represents a $2-million-per-well improvement for the year.

Wyoming drillers are exploring the deep Overthrust Belt that also extends into Utah, which finished the year in seventh place among deep drilling states. Utah's 25 deep wells were successful 64% of the time. Not counting wildcats, the success rate was 94%.

The 1984 total of 25 deep wells is the highest for Utah since 1974.

Deep drillers in New Mexico, who are exploring the western end of the Anadarko Basin, reported 22 deep completions during 1984. They cost an average of $2.4 million apiece, which is about what they cost in that state in 1983. The 54% success rate attained last year is pretty good, but not as good as 1983's 85% rate. Wildcatting continues to be profitable in New Mexico, with four out of seven exploratory wells completed as producers there during 1984. ■

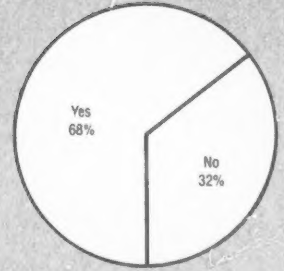
Note: PETROLEUM ENGINEER INTERNATIONAL has been analyzing deep drilling in the U.S. annually since 1944. Base data are acquired from various industry sources, including contract drilling companies and Petroleum Information Corp., Denver, Colo. Operating companies confirm the wells, and, through a special arrangement, provide us with cost data on a confidential basis. Laura Jacobus compiled the data for this report, which was written by Rich McNally.

Operators Remain Optimistic About Deep Wells

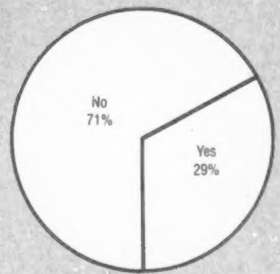
In a followup to the Deep Well Report, PEI editors surveyed the same operators to see how they perceive the current deep well situation. The results show that operators are somewhat optimistic about deep drilling activity in the coming year, but are concerned with persistent technical problems.

An encouraging note drawn from the survey was the limited amount of deep gas production capability currently shut in. Approximately 75% of the operators responding to the survey said that less than 25% of their gas production capabilities below 15,000 ft were shut-in presently. The survey also found that operators expect the situation to be better next year. Only 3% of the operators surveyed said they had more than 75% of their deep gas production capabilities shut in.

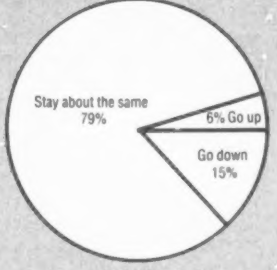
Nearly 25% of the responding operators said that they abandoned at least one producing deep well last year. The main reason was reservoir depletion. As far as well servicing is concerned, 46% of the operators said that the duration between servicing jobs for wells deeper than 15,000 ft was greater than 2 years. According to the survey, only 4% of the operators serviced their deep wells twice a year.



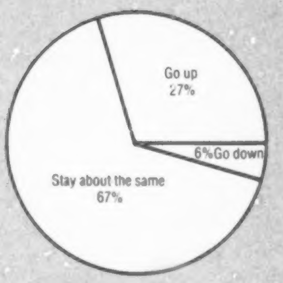
Do you plan to spud as many or more wells targeted to between 15,000 and 20,000 ft in 1985 than you did in 1984?



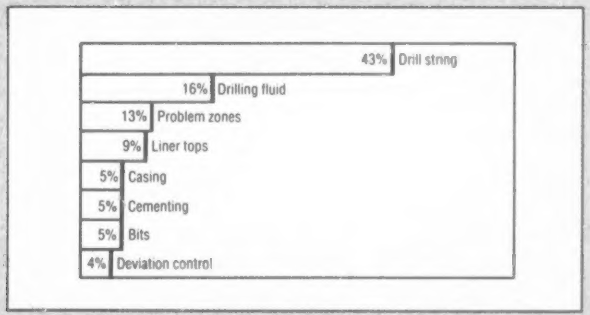
Do you plan to spud as many or more wells targeted to below 20,000 ft in 1985 than you did in 1984?



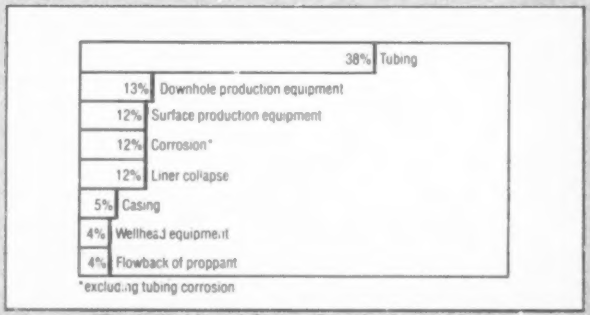
What do you expect rig rates for deep wells to do in 1985?



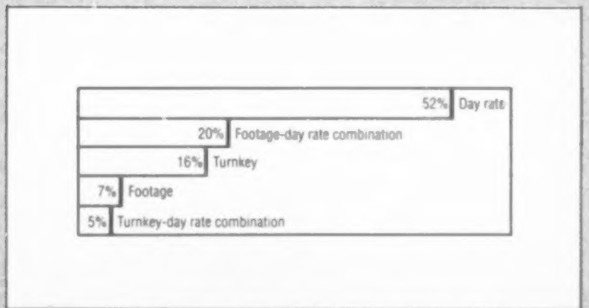
What do you expect overall drilling costs for deep wells to do in 1985?



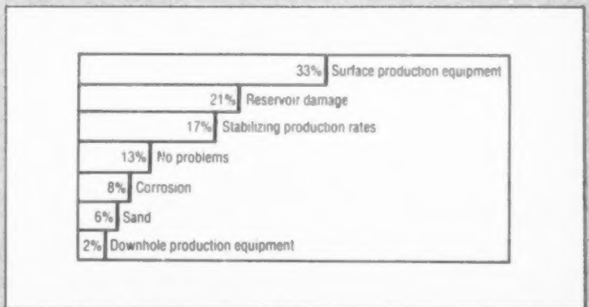
What is the biggest deep well drilling problem?



What is the biggest deep well production problem?



What type of rig contract were you using for drilling to targets below 15,000 ft in 1984?



What is the biggest problem in bringing a deep shut-in well back on stream?

Drilling Costs Rose In 1984

TABLE 1. Composite U.S. drilling costs and indexes by depth for the onshore lower-48 states

Depth, ft	1982 Index (1976 = 100)	1983 Index (1976 = 100)	1983 Annual change, %	1984 Index (1976 = 100)	1984 Annual change, %	1984 Cost, $
1,250	163.1	134.3	−17.7	157.7	17.4	40,000
2,500	162.0	138.4	−14.6	157.9	14.1	84,000
3,750	163.9	135.4	−17.4	158.8	17.3	130,000
5,000	173.2	150.0	−13.4	166.1	10.8	196,000
7,500	175.2	152.9	−12.7	169.0	10.5	413,000
10,000	177.3	159.1	−10.3	173.3	8.9	813,000
12,500	177.4	159.1	−10.3	173.4	9.0	1,460,000
15,000	181.4	169.5	−6.6	175.5	3.5	2,529,000
17,500	181.7	169.7	−6.6	175.7	3.5	4,127,000

Oil and gas well drilling costs rose in 1984, following a broad decline in 1983, according to the Department of Energy's Energy Information Administration. In its latest report, *Indexes and Estimates of Domestic Well Drilling Costs, 1983 and 1984*, EIA says that increases in composite well drilling costs in 1984 range from 3.5% for deep wells to more than 17% for very shallow wells.

EIA says that the most popular depth for onshore oil wells in the U.S. during 1983 was 3,750 ft. And the 1983 cost for such a well is put at $130,000, which is 17.7% lower than $159,000 – the average cost reported for 1982. The 1984 cost, however, rose by 17.4%, giving a 2-year change of −3.4%, or a 1984 cost of $154,000.

For all oil wells in all depth brackets covered by the EIA report, the highest projected 2-year cost decrease (3.7%) is indicated for the 7,500-ft depth.

In the group of most active depths in each of 13 geographical drilling areas, estimated changes in oil-well drilling costs for 1983 vary from a decrease of 33.6% for 3,750-ft wells in the Mid-Continent area to an increase of 4.3% for 7,500-ft wells in the Southeastern area.

In 1984, the cost changes ranged from an increase of 3% for 12,500-ft wells in the South Louisiana area to an increase of 27.4% for 3,750-ft oil wells in the Mid-Continent.

Regarding gas wells, EIA says that the 7,500-ft depth bracket was the most popular during 1983. Average 1982 drilling costs were $478,000 per well at this interval, with a projected decrease of 12.8% in 1983 and a 10.3% increase in 1984. This would put the average 1984 cost at $460,000 for a 7,500-ft well.

In the group of most active drilling depths in 1983 by area, gas well drilling cost changes for 1983 varied from a low of −30.3% in the Mid-Continent area for 10,000-ft wells to a high of 1.7% for 3,750-ft wells in the Southeastern area. For 1984, the projections range from an annual increase of 0.1% in the Western area for 7,500-ft wells to an increase of 23.9% for 10,000-ft wells in the Mid-Continent.

Gas well drilling cost indexes (1976 = 100) for all depths, in all areas, for 1984 are said to vary from a low of 143.4 for 2,500-ft wells in the Ark-La-Tex area to a high of 189.2 for 112,500-ft gas wells in the Rocky Mountains. The 2-year change in costs ranged from −15.8% for 15,000-ft wells in the Mid-Continent to 11.5% for 12,500-ft wells in the Rocky Mountains.

Dry hole drilling reportedly occurred most often for the 3,750-ft depth during 1983. The national average drilling cost for this depth in 1982 was $100,000, and EIA's projected national average annual changes for this depth were −13.4% during 1983 and 10.7% for 1984. The average cost last year for a dry hole at that depth, therefore, comes to about $96,000.

Changing dry hole costs for 1983 ranged from a decline of 0.3% for 3,750-ft holes in the Ark-La-Tex area to a 29.6% drop for 7,500-ft holes in the Mid-Continent. Cost changes projected for 1984 range from no change for 3,750-ft holes in the Ark-La-Tex area to a 19.9% increase for 7,500-ft dry holes in the Mid-Continent.

The most active depth bracket for all onshore drilling in the U.S. is between 2,500 and 4,999 ft, which is represented by the 3,750-ft depth in the EIA report. The agency's projected 1984 index (1976 = 100) for these wells is 158.8 (17.3% higher than the costs projected for 1983). The highest 1984 index (190.9) is projected for 2,500-ft wells in West Texas.

Annual cost changes for 1983 varied from −32.8% for all 3,750-ft wells in the Mid-Continent to 13.4% for 17,500-ft wells in the Southeast. Annual increases for 1984 vary from 0.4% for 17,500-ft wells in South Texas to 32.3% for 2,500-ft wells in the Mid-Continent.

Seismic Count Down In December

The number of seismic land crews and marine vessels searching for oil and gas in the U.S. and U.S. waters last December decreased by 27 from the November total. The prevailing reason, according to the Society of Exploration Geophysicists, was weather.

The December total (466) represents decreases of 5% from the previous month and from December of 1983. It is, however, a gain of 30% from the same month in 1978.

Etosha Extends Namibia Concession

Etosha Petroleum Pty. (Ltd) has signed a continuation of its 64-million-acre oil and gas concession in northern Namibia (South West Africa). The concession, which includes the Etosha Basin, was to have expired this June, but now will be extended for another 7 years.

Etosha, a subsidiary of Brilund Ltd., has exclusive prospecting rights in the concession area, in which an initial test well must be drilled by June 30, 1987.

Husky Discovery Offshore Newfoundland

Husky Oil Operations Ltd. struck gas, condensate, and oil with its Whiterose N-22 well on the Grand Banks, offshore Newfoundland.

Drilled to total depth of 15,184 ft, the well tested oil from two zones, at 11,696-719 ft and 11,621-60 ft. Gas was present in all five zones tested, and two of the zones contained condensate.

Combined amount of oil tested was 908 b/d. Gas tests turned up 666 MMcfd, and condensate amounted to 838 b/d.

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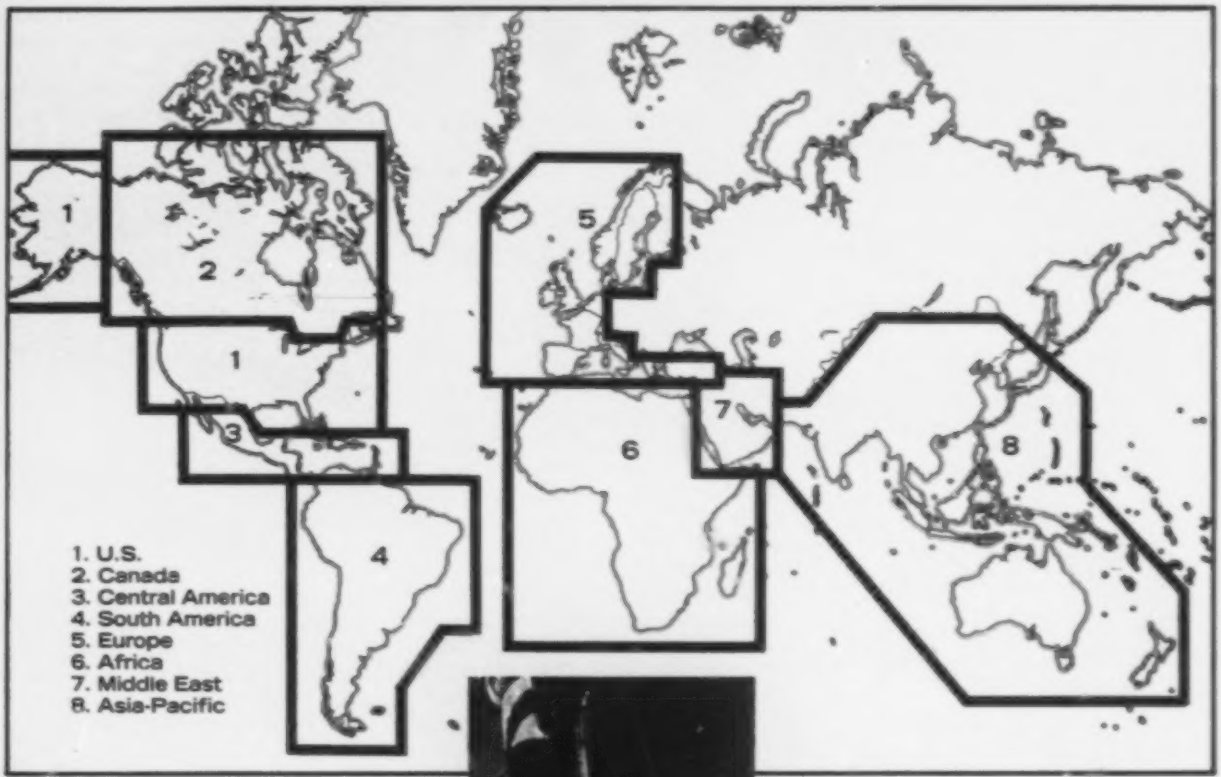
WORLD RIG LOCATOR



(Photo courtesy of Loffland Brothers Co.)

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Linda Hietala
Offshore Rig Locator Coordinator

Corinna Betterman
Land Rig Locator Coordinator

For over a quarter century, drilling contractors have given this magazine rig locator data, providing operators who let contracts with mechanical specifications and locations of contract rotary rigs throughout the world. Since the World Rig Locator's 1955 origin, other organizations periodically attempt similar concepts, while others shuffle and republish PEI rig locator data. This World Rig Locator, detailing 4,365 land rigs, 984 offshore rigs, and 573 drilling contractors, is the most complete presentation of contract drilling rigs published.

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ALLISON DRILLING CO 1275 Sherman St Ste 202 Denver CO 80203 303-861-2228
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FOUR CORNERS DRILLING CO PO Box 1067 Farmington NM 87401 505-327-0322
FREEMAN DRILLING CO 251 N Water Ste 10 Wichita KS 67202 316-263-7049
FRIO DRILLING CO 1216 Guaranty Bank Plaza Corpus Christi TX 78475 512-883-8555
FWA DRILLING CO PO Box 419 Wichita Falls TX 76307 817-322-0761

G

GABBERT-JONES INC 830 Sutton Place Wichita KS 67202 316-263-6209
GALLAGHER DRILLING INC PO Box 3046 Evansville IN 47730 812-425-6256
GALLOWAY DRILLING CO 340 Broadway Plaza Bldg 105 S Broadway Wichita KS 67202 316-263-1793
GARY DRILLING CO 7001 Fruitvale Extension Bakersfield CA 93308 805-589-0111
GCO DRILLING CO PO Box 3134 Abilene TX 79604 915-695-9410
GEOPROSCO INTL LTD PO Box 938 Abu Dhabi United Arab Emirates 0534 35521
GIBSON DRILLING CO PO Box 1540 Kilgore TX 75662 214-984-5068
J W GIBSON WELL SERVICE CO 3025 S Parker Rd Ste 711 Aurora CO 80014 303-752-2527
GLENDEL DRILLING CO 2761 Old Erath Rd PO Box 765 Abbeville LA 70511-0765 318-898-1637
GLOBAL MARINE DRILLING CO PO Box 4379 550 Westlake Park Blvd Houston TX 77210 713-496-8000
GLOBE DRILLING CO 1212 Interfirst Tower Tyler TX 75702 214-593-0281
GOLAR-NOR OFFSHORE A/S 105 Victoria St London SW1 6QT England 01 630 1515
GOLDEN STATE DRILLING INC 3312 Fruitvale Ave Bakersfield CA 93308 805-589-0730
GOLDRUS DRILLING CO PO Box 4394 Houston TX 77210 713-658-9271
GOLDRUS MARINE DRILLING CO PO Box 4394 Houston TX 77210 713-759-6337
GRACE BOMAC DRILLING 10403 W Colfax Ste 700 Lakewood CO 80215 303-234-1444
GRACE FRANCE DRILLING Div Grace Drilling Co 700 Travis Place Shreveport LA 71101 318-221-3434
GRACE MILLER DRILLING Rte 5 Box 450 Fort Smith AR 72901 501-646-3481
GRACE SABRE DRILLING 3300 NE 60 Oklahoma City OK 73121 405-478-1757
GRACE TRG DRILLING CO 3300 NE 60th St Oklahoma City OK 73121 405-478-4880
GRAND DRILLING 920 Hamilton Bldg Wichita Falls TX 76301 817-723-2422
GRAVES DRILLING CO 910 Union Center Wichita KS 67202 316-265-7233
GREAT EASTERN DRILLING & ENGINEERING CO 1904 Shaw Centre 1-Scotts Rd Singapore 0922 7377633
GREAT SOUTHERN OIL & GAS CO PO Box 52707 Lafayette LA 70505 318-233-4400
GREY WOLF DRILLING CO 2000 Post Oak Blvd Ste 1730 Houston TX 77056 713-626-1373
GRIFFIN-ALEXANDER DRILLING CO 13430 Northwest Fwy Ste 100 Houston TX 77040 713-460-1804
GUFFEY-SCHLENSKER DRILLING CORP PO Box 831330 Richardson TX 75083-1330 214-231-8551
GUTHRIE McLAREN DRILLING LTD 1760 717 Seventh Ave SW Calgary AB Canada 403-455-3191
GWALTNEY DRILLING CO PO Box 520 Washington IN 47501 812-254-5085

H

HACK DRILLING CO PO Box 5108 Abilene TX 79608 915-692-4111
H & S DRILLING CO 320 S Boston Ste 2000 Tulsa OK 74103 918-587-8163
HANING & YOUNG DRILLING CO 2910 Holmes Rd Houston TX 77051 713-734-5555
HARKINS & CO PO Box 1940 Alice TX 78332 512-664-3427
HARPEL DRILLING CO PO Box 2811 Casper WY 82602 307-265-9193
HARRIS DRILLING CO Box 99 Hwy 15 Grayville IL 62844 618-375-2211
HARRIS WELL SERVICE INC PO Drawer 949 Eunice LA 70535 318-457-3376
HEARTLAND DRILLING INC 600 One Main Place Wichita KS 67202-1399 316-265-9723
HELMERICH & PAYNE CA Apartado 16 Anzoategui Venezuela 22691
HELMERICH & PAYNE (COLOMBIA) DRLG CO Apartado Aerco Bogota Colombia 55088 2484249 396-43370 HPCOM CO
HELMERICH & PAYNE DEL ECUADOR INC Avenida Orellana 1682 Quito Ecuador 233-410
HELMERICH & PAYNE (GUATEMALA) DRLG CO 15 Avenida 16-66 Zone 13 Guatemala City Guatemala 66008
HELMERICH & PAYNE INTL DRILLING Utica at 21st St Tulsa OK 74114 918-742-5531
HELMERICH & PAYNE RASCO INC Bolivia Branch KM-3 Carretera A Cochabamba Casilla 3298 Bolivia 28478
HENLEY DRILLING CO 2420 InterFirst One Bldg Dallas TX 75202 214-849-0847
HERB EXPLORATION PO Box 1934 Abilene TX 79604 915-672-1291
HICKMAN DRILLING CO PO Box 1467 Woodward OK 73801 405-256-8688
W B HINTON DRILLING CO 1805 N Jefferson St Mt Pleasant TX 72455 214-572-8777
HI TOWER DRILLING Box 6650 Station D 321 Sixth Ave SW 16th Floor Calgary AB T2P 2V8 Canada 403-231-1211
HONDO DRILLING CO PO Drawer 2516 Midland TX 79702 915-682-9401
HOULDER MARINE DRILLING LTD 53 Leadenhall St London EC3A 2BR England 01-481-2020
HOUSTON OFFSHORE INTERNATIONAL INC One West Loop South Ste 804 Houston TX 77027 713-629-1400
HOUTECH ENERGY INC 10701 Corporate Dr Ste 230 Stafford TX 77477 713-240-0116
H-30 DRILLING INC 251 N Water Ste 10 Wichita KS 67202 316-263-2043
LEONARD HUDSON DRILLING CO PO Box 1876 Pampa TX 79066-1876 806-665-1816
HUGHES DRILLING CO Box 6001 Enid OK 73702 405-234-7222
HUNNICUTT CAMP DRILLING CO PO Box 399 Rio Vista CA 94571 707-374-2425 805-327-3948
CLINT HURT & ASSOCIATES INC PO Box 1973 Midland TX 79702 915-683-6381
HUTHNANCE DRILLING CO 601 Jefferson Houston TX 77002 713-659-4816
HYLTON DRILLING CO 7700 Downing Rd Bakersfield CA 93308 805-589-2062

I

INDRIL INC 2113 Enterprise Dr PO Box 668 Mt Pleasant MI 48858
INTERNATIONAL CHANDLERS 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
INTERNATIONAL PETROLEUM SERV CO Rte 6 N PO Box 547 Sheffield PA 16347 814-968-3295

J

JADE DRILLING LTD 5825 98th St Edmonton AB T6E 3L4 Canada 403-437-2930
J & C DRILLING CO PO Box 216 Refugio TX 78377 512-526-2376
J & W DRILLING CO Rte 3 Box 19 Gorman TX 76454 817-734-2665

J (Cont'd)

JAPAN DRILLING CO LTD No 11 Mori Bldg 6-4 Toranomon 2-chome Minato-ku Tokyo Japan 03-591-7391
JAY-LAN CORP 207 W 12th St Hays KS 67601 913-628-1316
JEBSENS DRILLING PLC Greenbank Rd East Tullos Aberdeen AB1 4BQ Scotland (0024) 878218
JFP WELL SERVICE INC 14425 Torrey Chase Blvd Ste #300 Houston TX 77014 713-893-4464
J L OFFSHORE DRILLING A/S One Hammerensgade DK 1291 Copenhagen K Denmark (45) (1) 111222
JOHNN DRILLING CO PO Box 6189 Odessa TX 79762 915-563-1280
JOMAX DRILLING LTD 1700 505 Third St SW Calgary AB T2P 3A8 Canada 403-265-5312
JONES DRILLING CO PO Box 665 Albany TX 76430 915-762-3652
LOYD JONES DRILLING CO PO Box 816 Perryton TX 79070 806-435-6871
JONES DRILLING CORP PO Box 1155 Duncan OK 73533 405-255-1191
J 3 DRILLING CO 1720 600 Bldg Corpus Christi TX 78473 512-881-9773
JUSTISS OIL CO PO Drawer N Jena LA 71342 318-992-4111
J-V DRILLING CO 4445 Commerce St Evansville IN 47710 812-424-3571
J W DRILLING CO 200 E First St Ste 500 Wichita KS 67202 316-263-5924

K

KANSAS DRILLING & WELL SERV INC 203 S Third Marion KS 66861 316-382-3734
KAY DRILLING CO PO Box 1622 Ponca City OK 74602 405-765-2406
K B DRILLING & PRODUCTION INC PO Box 1244 Taft CA 93268 805-763-5106
KCA DRILLING LTD KCA House 227 Shepherds Bush Rd London W6 7AS England 01-741-4811
KELLEY ONSHORE DRILLING CO 9207 Emmott Ste 105 Houston TX 77040 713-896-8142
K L KELLOGG & SONS 4220 Long Beach Blvd PO Box 7053 Long Beach CA 90807 213-422-1247
KENAI DRILLING LTD PO Box 6725 Odessa TX 79767 915-362-2323
KENAI DRILLING WEST COAST INC PO Box 2248 Orcutt CA 93455 805-928-1701
KENDALL DRILLING CO 3112 E Powell Evansville IN 47715 812-477-5535
KENTING DRILLING CO LTD #1910 800-Fifth Ave SW Calgary AB T2P 2P9 Canada 403-298-5250
KENTING DRILLING CO LTD One Denver Place Ste 220 999-18th St Denver CO 80202 303-893-1383
KENTING DRILLING SERV LTD Trent Lane Castle Donington Derby DE7 2NP England (0332) 850060 Telex 377905
KEYDRIL CO 2000 Capital Bank Plaza 333 Clay St Houston TX 77002 713-754-3769
KEYES OFFSHORE INC 14141 SW Fwy Ste 5200 Sugarland TX 77487 713-491-2002
KINGSNORTH MARINE DRILLING LTD 53 Leadenhall St London EC3A 2BR England 01-481-2020 (851) 884801

L

LADRIDO DRILLING CO 3610 W Wall Midland TX 79701 915-694-2546
LAGERSEN DRILLING CO 302 Beck Bldg Shreveport LA 71101 318-227-9939
L & G DRILLING CO PO Box 35 Mt Pleasant MI 48858 517-772-3083
LANDIS DRILLING CO One Marienfeld Place Ste 305 PO Box 3579 Midland TX 79702 915-683-4151
L & M DRILLING CO PO Box 470 Artesia NM 88210 505-748-2205
LANEX DRILLING CO 4013 NW Expy Ste 610 Oklahoma City OK 73116 405-840-5022
D R LAUCK OIL CO 221 S Broadway Ste 400 Wichita KS 67202 316-263-8267
LEBEN DRILLING CO 105 S Broadway Ste 640 Wichita KS 67202-4260 316-264-2375
LEE DRILLING INC 4802 Derrick Dr Abilene TX 79601 915-677-3566
LEEMAN DRILLING CO 1400 Fifty Penn Place Oklahoma City OK 73118 405-842-1622
DAN LESTER DRILLING CO PO Drawer N Jefferson TX 75657 214-665-2511
LLL DRILLING CO PO Box 188 Bloomfield NM 87413 505-632-8045
LOFFLAND BROS CO PO Box 2847 Tulsa OK 74101 918-622-9330
LOHMANN DRILLING CO 18 NW Fourth St Ste 204 Evansville IN 47708 812-428-4180
LORD DRILLING CO 14618 W Sixth Ave Golden CO 80401 303-279-2471
LYNX DRILLING CO PO Box 13300 Arlington TX 76013 817-261-4181

M

MAERSK DRILLING Esplanaden 50 DK-1098 Copenhagen K Denmark 01-14 15 14 (855) 16201 MDrill DK
MAGEE-POOLE DRILLING CO PO Box 2000 Alice TX 78332 512-664-1891
MAGIC CIRCLE DRILLING CO 4141 Northwest Expwy Oklahoma City OK 73116 405-843-6654
MAGNUM MARINE CORP LP Tower Ste 200 PO Box 3579 Conroe TX 77305 409-539-5000 713-367-4000 (Houston) Telex 792749
R L MANNING CO 1700 Broadway Ste 2200 Denver CO 80290 303-839-1977
MARINE DRILLING CO 900 CCNB Center South Corpus Christi TX 78411 512-884-8851
MARINE DRILLING SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-653-8700
MARION DRILLING & SERVICES CO PO Box 3027 Mobile AL 36652 205-626-3924
MARLIN DRILLING CO 1333 West Loop South Ste 780 Houston TX 77027-9178 713-627-1161
MARLIN-WEST DRILLING CO 3025 Gibson St PO Box 551 Bakersfield CA 93302 805-327-8304
MAXWELL HERRING DRILLING CORP PO Box 1297 Tyler TX 75710 214-593-1737
MAYRONNE CO Div Mayronne Enterprises Inc PO Box 432 Harvey LA 70059 504-366-7286
McALLISTER DRILLING INC 251 North Water Ste 10 Wichita KS 67202 316-263-6972
McBAY OIL & GAS INC PO Box 1085 Crockett TX 75835 409-544-5168
J W McCUTCHEN DRILLING CO 912 Oil & Gas Bldg Wichita Falls TX 76301 817-322-9231
McLENNAN DRILLING CO PO Box 6 Nowata OK 74048 918-273-1265
McMURREY PETROLEUM INC PO Box 1899 Kilgore TX 75662 214-984-3578
McVAY DRILLING CO 2440 Mid-Continent Tower Tulsa OK 74103 505-397-3311
MEGARGEL DRILLING CO PO Box 356 Megargel TX 76370 817-563-2311
MELLON DRILLING CO 2121A Knickerbocker Rd San Angelo TX 76904 915-942-6732
MELTON DRILLING CO 7101 Downing Ave Bakersfield CA 93308 805-587-0521
MERCURY DRILLING CO 1701 SE 25th St Oklahoma City OK 73129 405-672-4441

M (Cont'd)

MESA DRILLING CO PO Box 1481 Abilene TX 79604 915-673-4787
MGF DRILLING CO-HOUSTON 2626 Richmond Ave Ste B Houston TX 77098 713-526-7236
MGF DRILLING CO-LAFAYETTE PO Box 938 Scott LA 70583 318-237-6161
MGF DRILLING CO-MIDLAND PO Box 6370 Midland TX 79711 915-563-4850
MID ATLANTIC OIL CO DRILLING DIV PO Box 196 Belle Valley OH 43717 614-732-567[illegible]
MILLER CONTRACT DRILLING INC PO Box 478 Livingston TN 38570 615-823-6425
GEORGE N MITCHELL DRILLING CO Airport Rd PO Drawer 111 Carmi IL 62821 618-382-2343
M N D DRILLING CORP-NORTHERN DIV PO Box 248 Bridgeport TX 76026 817-683-7922
M N D DRILLING CORP-SOUTHERN DIV PO Box 109 Magnolia TX 77355 713-356-8280
MOLEN DRILLING CO Grand Bldg Ste 500 PO Box 2222 Billings MT 59103 406-252-2591
MONTEREY DRILLING CO PO Drawer 30740 Santa Barbara CA 93130 805-967-9810
MONTGOMERY DRILLING CANADA LTD 980-700 Fourth Ave SW Calgary Alberta T2P 3J4 Canada 403-290-1644
MONTGOMERY DRILLING CO PO Box 2508 Bakersfield CA 93303 805-393-9620
MONTREAL ENGENHARIA S/A Rua Sao Jose 90/4 And Rio de Janeiro-RJ-Brazil 20013 (021) 224-8999
MORAN BROS INC PO Box 4502 Houston TX 77210 713-491-2941
MORANCO DRLG INC PO Box 1860 Hobbs NM 88240 505-397-3511
E W MORAN DRILLING CO PO Box 7519 Wichita Falls TX 76307 817-691-3000
MORCO A/S PO Box 65 N-4056 Tananger Norway 04-696766
MORRISON DRILLING & PRODUCING CO One Energy Square Ste 1-LB Abilene TX 79601 915-677-8523
MURCO DRILLING CORP 1900 Beck Bldg Shreveport LA 71101 318-221-7373
MURFIN DRILLING CO 250 N Water Ste 300 Wichita KS 67202 316-267-3241
MURLYNSON DRILLING CO PO Drawer 1876 Alice TX 78333 512-664-4540
PETE MURPHY DRILLING CO PO Drawer 1876 Alice TX 78333 512-664-3807

N

NABORS ALASKA DRILLING INC Anglo Energy Co 4300 B St Ste 600 Anchorage AK 99503 907-561-4440
NABORS DRILLING LTD 324 Eighth Ave SW 1107 Home Oil Tower Ste 1107 TD Square Calgary AB T2P 272 Canada 403-263-6610
NATIONAL DRILLING CO PO Box 4017 Abu Dhabi UAE 958-22553 FM NADRIL
NECK DRILLING CO Bin X Taft CA 93268 805-769-8811
NEDDRILL (NETHERLAND) BV PO Box 1925 3000 BX Rtdm Coolsingel 139 Rotterdam Netherlands 3012 AG 10-17-79-66
NELSON DRILLING & WELL SERV 2100 Louisiana Tower Shreveport LA 71101 318-221-6890
DAVID NEW DRILLING CO PO Box 1487 Natchez MS 39120 601-442-1607
NEW JERSEY DRILLING CO Rte 206 Box 8 Netcong NJ 07857 201-347-2269
NICKLOS DRILLING CO 5200 Interfirst Plaza 1100 Louisiana Houston TX 77002 713-658-8245
NICOR DRILLING CO One Warren Place 6100 S Yale Ste 401 Tulsa OK 74136 918-494-5700
NIXON DRILLING CO 201 S Laurel St PO Box 632 Luling TX 78648 512-875-2416
NOBLE DRILLING CORP 1924 S Utica Ste 600 Tulsa OK 74104 918-749-9901
NORDRILL INTERNATIONAL INC 7670 Woodway Ste 150 Houston TX 77063 713-974-0000
JAMES R NORMAN DRILLING CO Rte 3 Box 391 Dickson TN 37055 615-645-4361
NORTON DRILLING CO 606 Republic Bank Bldg Lubbock TX 7940[illegible] 806-747-3324
A N NORWOOD INC PO Box 310 Midland TX 79702 915-683-3972
NOWOTNY & CONLEY DRILLING CORP 1800 Beck Bldg 400 Travis St Shreveport LA 71101 318-227-0442
N R G DRILLING INC PO Box 1157 Liberal KS 67901 316-624-1818

O

OCEAN DRILLING & EXPL CO PO Box 61780 New Orleans LA 70161 504-561-2811
OCEAN DRILLING SERVICES INC 1901 N Akard Dallas TX 75201 214-653-8700
ODEBRECHT PERFURACOES LTDA Rua da Gloria 290 - 10th CEP 20241-Rio de Janeiro RJ-Brazil (021) 221-0863 (391) 02133197 Odel BR
ODFJELL DRILLING & CONSULTING CO A/S Kokstadflaten 5 PO Box 33 N-5061 Kokstad Norway 05-22 77 80 Telex: 42634 odccn/40507 odbas (856)
OIL DRILLING & EXPL LTD Level 36 AMP Centre 50 Bridge S Sydney NSW 2000 Australia 232-2066
ELMER OELZE JR RR 1 Box 148 Nashville IL 62263 618-327-3807
OKLAHOMA WARRIOR DRILLING CORP 5801 N Broadway Ste 200 Oklahoma City OK 73118 405-840-3902
OLSEN DRILLING CO One Denver Place Ste 3300 999-18th St Denver CO 80202 303-292-9930
O'NEAL DRILLING CO PO Box 4660 Fort Worth TX 76106 817-625-8246
ONEOK DRILLING CO 70[illegible] S Yale Tulsa OK 74153 918-494-8725
ORKUSTOFNUN STATE DRILLING CONTRS Grensasveg 9 108 Reykjavik Iceland
OWEN DRILLING CO PO Box 861 Magnolia AR 71753 501-234-6300
JACK OWENS SERV CO 1626 Del Dayo Dr Carmichael CA 95608 916-485-8995

P

PACNORSE DRILLING SA PO Box 1401 Orange CA 92668 714-567-8215
PADRE DRILLING CO PO Box 9925 Corpus Christi TX 78469 512-241-2871
PAN ARCTIC DRILLING PO Box 487 Nisku AB T0C 2G0 Canada 403-955-7944
PAR-CO DRILLING INC PO Box 873 Natchez MS 39120 601-442-6421
PARKER DRILLING CO 8 E Third St Tulsa OK 74103 918-585-8221
PEARL EXPLORATION INC PO Box 2179 Alice TX 78332 512-664-2605
PENROD DRILLING CO 2200 Thanksgiving Tower Dallas TX 75202 214-880-1700
P E P DRILLING CO 123 S Tenth PO Box 824 Mt Vernon IL 62864 618-242-2205
PHELPS DRILLING INTERNATIONAL LTD #800 11012 Macleod Trail S Calgary AB T2J 6A5 Canada 403-278-6050
PHOENIX MANAGEMENT CORP 2925 Briarpark Ste 500 Houston TX 77042 713-784-2420
PICKRELL DRILLING CO 110 N Market Ste 205 Wichita KS 67202 316-262-8427

P (Cont'd)

PNOC ENERGY DRILLING INC Philippine National Oil Co Merritt Rd Ft Bonifacio Metro Manila Philippines 815-89-61
POOL ARABIA LTD PO Box 4271 Houston TX 77210 713-780-4999
POOL AUSTRALIA INC PO Box 4271 Houston TX 77210 713-780-4999
POOL INTAIRDRIL PO Box 4271 Houston TX 77210 713-780-4999
POOL OFFSHORE PO Box 4271 Houston TX 77210 713-780-4999
POOL OFFSHORE SERVICE 296 Prospect St PO Box 2166 Houma LA 70361 504-868-1430
POOL SANTANA LTD PO Box 4271 Houston TX 77210 713-780-4999
GENE PORTER DRILLING CO PO Box 389 Cushing OK 74023 918-225-1563
POWER RIG DRILLING CO PO Box 52808 Lafayette LA 70505 318-234-4525
POZOS INTERNATIONAL DRILLING SERVICES CO 9 Pozos Lane PO Box 3339 Conroe TX 77305 409-756-4161
PRC DRILLING CO PO Box 1121 Corpus Christi TX 78403 512-289-6763
PRECISION DRILLING LTD Ste 1010 500 Fourth Ave SW Calgary AB T2P 2V6 Canada 403-264-4882
PRECISION EXPL CO PO Box 278 Olney IL 62450 618-395-8448
PREUSSAG AKTIENGESELLSCHAFT Erdol und Erdgas PO Box 1628 3150 Peine West Germany (05176)-171
PRUET-RAM CO PO Box 31 El Dorado AR 71730 501-863-3612
PT MAFHABOR INDONESIA J1 IR H JUANDA III/7-9 Jakarta Indonesia
PT META EPSI PRIBUMI DRILLING CO JL Madiun No 12 JKT 10310 PO Box 4311 JKT 10001 Indonesia 348900

Q

QUARLES DRILLING CORP 1503 Engineers Rd Belle Chasse LA 70037 504-392-4191
QUARLES DRILLING CORP 7633 E 63 Place Suite 500 Tulsa OK 74133 918-250-0515
QUITRAL-CO S.A.I.C. Carrito 822 9o Piso Buenos Aires Argentina 1010 40-8310

R

RAINBOW DRILLING CO 1108 N Kilgore St PO Box 1779 Kilgore TX 75662 214-984-5095
RAINS & WILLIAMSON OIL CO 435 Page Court 220 W Douglas Wichita KS 67202 316-265-9686 913-735-2215 913-625-7976
RAM DRILLING CO PO Box 118 Browns IL 62818 618-446-5117
RANGE DRILLING CO 240 Page Ct 220 W Douglas Wichita KS 67202 316-265-6231
RAPAD DRILLING CO (See CHESLEY PRUET DRILLING CO)
RATLIFF DRILLING CO PO Box 988 Duncan OK 73533 405-255-2916
RAY RESOURCES CORP PO Box 203 Culloden WV 25510 304-743-9057
READING & BATES DRILLING CO 901 Threadneedle Ste 200 PO Box 79627 Houston TX 77279 713-496-5000
REBEL RIG #3 LTD PO Box 1151 Natchez MS 39120 601-446-7831
REBSTOCK DRILLING CO 2601 Lexington Ave Kenner LA 70062 504-467-1321
RED ARROW DRILLING LTD 520 304 Eighth Ave SW Calgary AB T2P 1C2 Canada 403-264-0695
RED TIGER DRILLING CO 1720 Kansas State Bank Bldg Wichita KS 76202 316-263-2371
REGENT DRILLING LTD 12540 129th St Edmonton AB T5L 4W5 Canada 403-455-2121
REPUBLIC DRILLING CO PO Box 2945 Santa Fe Springs CA 90670 213-595-4505
RESOURCE DRILLING INC PO Box 4341 Houston TX 77210 713-932-1100
RICHARDS-ARMSTRONG INC PO Box 1149 Bay City TX 77414 409-245-8389
RICHARDS DRILLING ASSOC PO Box 1149 Bay City TX 77414 409-245-8389
RICHARDS DRILLING CO PO Box 1149 Bay City TX 77414 409-245-8389
RICHARDS DRILLING LTD PO Box 1149 Bay City TX 77414 409-245-8389
RICHTER DRILLING PTY LTD 14 Cribb St Milton Vacc Bldg 1st Floor GPO Box 2197 Brisbane Queensland 4000 Australia (07) 369-6255 (07) 229-2544
RILEY DRILLING CO 907 Scurry Big Spring TX 79720 915-394-4454
RINE DRILLING CO 300 W Douglas Ste 600 Wichita KS 67202 316-267-1333
RIO COLORADO DRILLING CO PO Drawer 8243 Midland TX 79708 915-561-9901
RIO COLORADO SA Sarmiento 663 7th Floor 1316 Buenos Aires Argentina (390) 18930
RIO GRANDE DRILLING CO 2300 Tower Life Bldg San Antonio TX 78205 512-224-4572
ROBERSON DRILLING CO PO Box 1966 Ardmore OK 73402-1966 405-223-1277
ROBINSON DRILLING OF TEXAS PO Box 311 Big Spring TX 79720 915-267-5277
ROCKHOLD ENGINEERING INC PO Box 698 Great Bend KS 67530 316-792-2506
ROCKWELL DRILLING CO PO Box 993 400 W Fifth St Holdenville OK 74848 405-379-5414
ROCKY MOUNTAIN DRILLING LTD 521 Third Ave SW #430 Calgary AB T2P 3T3 Canada 403-234-7779
ROD RIC CORP PO Box 10847 Midland TX 79702 915-682-7880
MIKE ROGERS DRILLING CO PO Box 126 Magnolia AR 71753 501-234-2322
ROSAMOND DRILLING CO 1300 Main Ste 1800 Houston TX 77002 713-951-9155
ROSS DRILLING CO PO Box 2008 3201 Sandefjord Norway 34-63481
ROWAN COMPANIES INC 5051 Westheimer 1900 Post Oak Tower Houston TX 77056 713-621-7800
ROWAN DRILLING-US 1900 Post Oak Tower Bldg 5051 Westheimer Houston TX 77056 713-621-7800
ROWAN INTERNATIONAL INC 5051 Westheimer 1900 Post Oak Tower Houston TX 77056 713-621-7800
ROYAL DRILLING INC PO Box 1971 Ada OK 74820 405-332-1426
R R A INC 510 Hardage Center Wichita KS 67202 316-262-3411
R W I T DRILLING CO 324 W Main PO Box 551 Holdenville OK 74848 405-379-5491

S

SABRE DRILLING INC 1215 24th St W #140 Billings MT 59102 406-656-0730
SAFARI DRILLING CORP PO Box 3236 Abilene TX 79604 915-677-2826
SAGE DRILLING CO 202 S St Francis Wichita KS 67202 316-263-6139
SAIPEM SPA PO Box 12072 San Donato Milanese 20097 Milano Italy 02 5201 (02) 520-9953
SALEN OFFSHORE CO 580 Westlake Park Blvd Ste 600 Houston TX 70079 713-496-7770
SANDIA DRILLING CO 2500 Broadway Bldg Edmond OK 73034 405-340-4500
S & T DRILLING LTD PO Box 4890 Edmonton Alberta T6E 5G7 Canada 403-955-7011

S (Cont'd)

SAN PATRICIO CORP PO Box 986 Corpus Christi TX 78403 512-289-6717
SANTA FE DRILLING CO 505 S Main St PO Box 1401 Orange CA 92668 714-567-8000
SAWYER DRILLING & SERV INC 1300 American Tower Shreveport LA 71101 318-227-8150
SCANDINAVIAN MONTGOMERY DRILLING PO Box 2506 Bakersfield CA 93303 805-393-9620
SCHLENSKER DRILLING CORP PO Box 831330 Richardson TX 75083-1330 214-231-8551
DON SCOTT DRILLING CO PO Box 177 Jonesville MI 49250 517-849-9237
JERRY SCOTT DRILLING CO 319 N Harvey Rd PO Box 1488 Seminole OK 74868 405-382-2202
SEA DRILLING NETHERLANDS 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SEDCO DRILLING Box 6620 Postal Sta D 1700 321 Sixth Ave SW Calgary AB T2P 3R3 Canada 403-231-1161
SEDCO INC Middle East Land Rigs 1901 N Akard Dallas TX 75201 214-720-8700
SEDCO INTERNATIONAL SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SEDCO MARITIME INC 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SEDCO-UNDERSEAS DRILLING LTD 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SERVICE DRILLING CO PO Box 5320 Borger TX 79008-5320 806-273-7573
SERVICE EQUIPMENT & ENGINEERING INC 900 Dunn St Houma LA 70360 504-868-9010
706 DRILLING CO LTD 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SH & J DRILLING CORP PO Drawer 888 Magnolia AR 71753 501-234-4600
DEAN SHANK DRILLING CO 2908 Engineers Rd Belle Chasse LA 70037 504-392-1685
SHARP DRILLING CO PO Box 1271 Midland TX 79702 915-683-3384
SHELBY DRILLING 5350 S Roslyn Ste 300 Englewood CO 80111 303-740-2200
SHELBY DRILLING LTD 4A 2016-25th Ave NE Calgary AB T2E 6Z4 Canada 403-230-3655
SHULER DRILLING CO 3514 W Hillsboro El Dorado AR 71730 501-863-7234
SIERRA DRILLING CO PO Box 2681 Midland TX 75231 214-363-7163
SIMMONS DRILLING INC 7000 S Potomac Englewood CO 80112 303-799-0161
SIMMONS DRILLING LTD 600-1177 11th Ave SW Calgary AB T2R 1K9 Canada 403-244-5340
SITTON DRILLING CO 916 Main Ste 503 Lubbock TX 79401 806-763-4442
SKINNER MARINE OPERATIONS LTD PO Box 46 San Fernando Trinidad West Indies 65-77265
SLAWSON DRILLING CO 200 Douglas Bldg Wichita KS 67207 316-263-3201
SLOAN DRILLING CO 2761 E Skelly Dr 2700 Center Bldg Tulsa OK 74105 918-745-6570
A/S SMEDVIG DRILLING CO PO Box 110 4001 Stavanger Norway (04) 5-20040
SMITH DRILLING CO Rte 1 S PO Box 150 Lawrenceville IL 62439 618-943-2342
CARL E SMITH PETROLEUM INC PO Box 4 Sandyville WV 25275-0004 304-273-9313
SOJOURNER DRILLING CORP PO Box 3234 Abilene TX 79604 915-672-2832 915-677-6269
SONAT INTEROCEAN DRILLING SA PO Box 2765 Houston TX 77252-2765 713-871-7500
SONAT OFFSHORE DRILLING INC PO Box 2765 Houston TX 77252-2765 713-871-7500
SONAT SOUTHLAND DRILLING CO 14811 St Marys Ste 270 Houston TX 77079 713-497-1995
SONPETROL Orense, 32 28020 Madrid Spain 455.18.58/62/66
SOUTHEASTERN DRILLING SERVICE INC 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SOUTHEASTERN OCEAN DRILLING CO SA 1901 N Akard Cumberland Hill Dallas TX 75201 214-720-8700
SOUTH SEAS DRILLING CO PO Box 1401 Orange CA 92668 714-558-1300
SOUTH TEXAS DRILLING CO 2211 NE Loop 410 Ste 100 San Antonio TX 78205 512-654-4085 713-784-4051
SPARTAN DRILLING INC 8223 Willow Place South Ste #105 Houston TX 77070 713-955-0625
SPARTAN DRILLING LTD 1800 801 Sixth Ave SW Calgary AB T2P 3W2 Canada 403-262-7778
STERLING DRILLING CO PO Drawer 3068 Midland TX 79702 915-685-3054
STEWART BROTHERS DRILLING CO PO Box 2067 Grants NM 87020 505-287-2986
STOEPPELWERTH DRILLING INC 1111 E "H" St McCook NE 69001 308-345-1766
SWEETMAN DRILLING INC 500 Heritage Park Place Wichita KS 67202 316-265-5561

T

TAHOE DRILLING CO 4402 W Industrial Midland TX 79703 915-697-4173
TAYLOR DRILLING CO PO Box 597 Chehalis WA 98532 206-748-3445
TELEDYNE MOVIBLE OFFSHORE INC PO Box 31936 Lafayette LA 70505 318-365-8681
TEMPLE DRILLING CO 3300 Capital Bank Plaza Houston TX 77002 713-759-0960
TESORO DRILLING CO PO Drawer 2909 Laurel MS 39440 601-425-1481
TEXAS DRILLING CO PO Box 240 Abilene TX 79604 915-673-5024
TEXZONA DRILLING CORP 21 Windmill Circle PO Box 6127 Abilene TX 79608 915-695-4963
THEISS DRILLING CO 4726 Jacksboro Hwy Ste E Wichita Falls TX 76302 817-761-3111
THOMAS DRILLING CO PO Box 400 Duncan OK 73533 405-252-5580
THOMPSON DRILLING CO 4 Corporate Plaza Dr Ste 102 Newport Beach CA 92660-7988 714-644-9292
THUNDERBOLT DRILLING INC PO Box 129 Winnsboro TX 75494 214-342-5221
TMBR DRILLING INC 5609 W Industrial (79701) PO Drawer 10970 Midland TX 79702 915-563-1927
TOLTEK DRILLING CO 340 Denver Club Bldg Denver CO 80202 303-571-1331
TOMMY'S OILWELL DRILLING INC PO Box 899 Graham TX 76046 817-549-6960
TOP DRILLING INC 2601 NW Expy Ste 101E Oil Center Oklahoma City OK 73112-7138 405-848-4414
TOWER DRILLING CO 11990 Grant St Ste 21F Northglenn CO 80233 303-452-0111
TRANSCONTINENTAL DRILLING INC JACKSON DIV 1700 Capital Towers Jackson MS 39201 601-355-1[illegible]42

T (Cont'd)

TRANSCONTINENTAL DRILLING INC MAGNOLIA DIV Magnolia AR 71753 501-234-5011
TRANSCONTINENTAL DRILLING INC SAN ANGELO DIV 3184 Executive Dr San Angelo TX 76903 915-653-3324
TRANSOCEAN DRILLING CO LTD PO Box 25861 Oklahoma City OK 73125 405-270-2804
TRANSWORLD DRILLING CO PO Box 25861 Oklahoma City OK 73125 405-270-2804
TRIAD DRILLING Sub UGI Development Co 5400 N Grand Blvd Ste 310 Oklahoma City OK 73112 405-948-6006
TRIANGLE DRILLING LTD Rua da Gloria 290 - 10 20241 Rio de Janeiro - RJ Brazil (021) 221-0860 Telex (391) 021 33197 ODEI BR
TRI-CITY DRILLING LTD 14305 120th Ave Edmonton AB T5L 2R8 Canada 403-453-3771
TRIGG DRILLING CO PO Box 18605 Oklahoma City OK 73154 405-528-4456
TRI-LAND DRILLING CO PO Box 18605 Oklahoma City OK 73154 405-528-1463
TRI-SERVICE DRILLING CO 1200 Petroleum Bldg Midland TX 79701 915-684-6641
TROPIC SHIPPING ENTERPRISES LTD c/o Tropic Drilling Co 17150 Butte Creek Rd Ste 100 Houston TX 77090 713-444-3970
TRUE DRILLING CO PO Drawer 2360 Casper WY 82602 307-237-9301
TUCKER DRILLING CO PO Box 1876 San Angelo TX 76901 915-655-6773
TWO R DRILLING CO PO Box 1968 Houma LA 70361 504-876-6987
TWT EXPLORATION INC PO Box 1329 Park City UT 84060 801-649-8212

U

UNDERWATER GAS DEVELOPERS LTD 3786 Hwy #3 RR #1 Sherkston Ontario L0S 1R0 Canada 416-894-1731
UNDERWOOD OIL WELL SERV INC Ouachita National Bank Bldg Ste 808 Monroe LA 71201 318-388-0385
UNION DRILLING INC PO Drawer 40 Buckhannon WV 26201 304-472-4610
UNIT DRILLING & EXPL CO 1100 Petroleum Club Bldg Tulsa OK 74119 918-582-3188
U R C DRILLING CORP 4141 Northwest Expy Oklahoma City OK 73116 405-842-1039

V

VAUGHN GOOD DRILLING INC PO Box 3744 Enid OK 73702 405-233-3899
VECO DRILLING INC 2457 Industrial Blvd PO Box 1705 Grand Junction CO 81502 303-242-6912
VENTURE DRILLING CO 848 E Main PO Box 1353 Cushing OK 74023 918-225-3269
VERNA CORP PO Box 952 Odessa TX 79760 915-381-6910
VIERSEN & COCHRAN DRILLING CO PO Box 19227 Oklahoma City OK 73144 405-681-6611
HERMANN VON RAUTENKRANZ INTERNATIONALE TIEFBOHR GMBH & CO KG ITAG PO Box 114 D-3100 Celle Germany 841-925-241 ITAGCD

W

WARREN INTERSTATE DRILLING CO 906 Utica Tower Tulsa OK 74104 918-749-8361
W E K DRILLING CO PO Box 1498 Roswell NM 88201 505-623-5070
WELL SERVICES LTD PO Box 152 San Fernando Trinidad West Indies 649-7531
W E S CORP PO Box 1329 Park City UT 84060 801-649-8212
WES-MOR DRILLING INC PO Box 1269 Graham TX 76046 817-549-3383
WESTBRIDGE DRILLING (PTY) LTD 69 Outram St West Perth WA 6005 Australia 09-322-1445
WESTBURNE DRILLING CANADA LTD 100 535 Seventh Ave SW Calgary AB T2P 0Y4 Canada 403-233-6600
WESTBURNE DRILLING INC 999-18th St #1860 PO Box 13079 Denver CO 80201 303-298-8800
WESTBURNE WORLDWIDE DRLG LTD PO Box 1558 Hamilton S Bermuda 809-292-3536/37
WESTERN OCEANIC INC 515 S Post Oak Rd PO Box 56006 (77256) Houston TX 77027 713-629-2726
WESTERN OFFSHORE DRILLING & EXPLORATION CO 3333 Michelson Dr Irvine CA 92730 714-975-7034
WESTERN WELL DRILLING INC 11299 Brighton Rd Henderson CO 80640 303-288-2247
WES-TEX DRILLING CO PO Box 3739 Abilene TX 79604 915-677-9121
WESTWOOD DRILLING CO PO Box 5129 Woodward OK 73803 405-254-5940
WHEATSTATE OILFIELD SERVICES INC PO Box 329 Pratt KS 67124 316-672-7514
WHELESS DRILLING CO 920 Commercial National Bank Bldg Shreveport LA 71101 318-222-3137
WHITE & ELLIS DRILLING INC 401 E Douglas Ste 500 Wichita KS 67202 316-263-1102
WILCOX DRILLERS INC PO Box F F Natchez MS 39120 601-446-5021
WILH WILHELMSEN Roald Amundsens Gate 5 Oslo 1 Norway Telex 78900
WILLBROS DRILLING INC FM 1788-2 mi S I-20 PO Box 833 Rte 6 Midland TX 79701 915-563-0221
WILLIAMS DRILLING CO OF SOUTH TEXAS PO Drawer 3050 Alice TX 78333 512-668-9867
WILLIS DRILLING CO PO Box 479 Edinburg TX 78540 512-383-3888
WILSON BROS DRILLING CO 217 E Kaliste Saloom Rd PO Drawer 53628 Lafayette LA 70505 318-233-5950
LES WILSON INC PO Box 331 Carmi IL 62821 618-382-4666
WOOLF & MAGEE INC PO Box 6566 Tyler TX 75711 214-561-4051
W W CORP 220 N Main St Madisonville KY 42431 502-821-0087
WYOMING WELL SERV INC PO Box 340 Cody WY 82414 307-587-4249

Y

YOUNG DRILLING CO Bloomfield Hwy PO Box 717 Farmington NM 87401 505-327-5218

Z

ZAPATA OFFSHORE CO Zapata Tower PO Box 4240 Houston TX 77210-4240 713-226-6501
ZENITH DRILLING CORP Fourth Financial Center Ste 505 Wichita KS 67202 316-265-6697

Drawworks Manufacturers Abbreviations

Bethlehem Supply Co.	Beth
Bucyrus-Erie Co.	B-E
Cabot Corp Machinery Div.	Cbot
Cardwell Mfg. Co.	Crdw
Challenger	Chal
Continental Emsco	Emsco
Cooper Mfg. Corp.	Coop
DeMag Mfg. Co.	DeMg
Ellis-Williams	E-W
Ewbank Mfg. Div. Inc.	Ewb
George E. Failing Co.	Fail
Foramines	Fora
Gardner-Denver	G-D
Hacker Machine & Supply Co.	Hack
Haniel & Lueg	H-L
Hooper Machine Works Inc.	Hoop
Houston Systems	HS
Howard-Turner Machine Works	HT
Ideco Inc.	Idco
Ingersoll-Rand Co.	I-R
Joy Mfg. Co.	Joy
Justiss-Mears Oil Co.	J-M
Lee, Harold Engineering	Lee
Mayhew Supply Co Inc.	May
Mid-Continent Supply	MC
National Supply Co.	Nat
OIME	OIME
Oilwell Div. (U.S. Steel)	Olwl
OPI Pump Div.	OPI
Quincy Mfg.	Quin
Salzgitter Maschinen Mfg. Co.	Salt
Skytop/Brewster	S/B
Spencer-Harris Machine & Tool Co.	S-H
Superior	Sup
Tri Service Mfg. Co.	TSM
Wagner-Morehouse Inc.	W-M
Walker-Neer Mfg. Co. Inc.	W-N
Weiss Corp.	Weis
Wheland Co.	Whln
Wichtex Machinery Co. Inc.	Wich
Wilson Mfg. Co. Inc.	Wils
Worth Co.	Worth

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US Contract Rotary Land Drilling Rigs

ALABAMA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Culver Drlg	20	dsl	2000	Nat 1320	2000	25
Justiss Oil	11	dsl	1200	Emsco GB800	1600	14
BALDWIN						
Underwood Oil Well Serv	12	dsl	350	S/B N3	350	4
CLARKE						
Chesley Pruet Drlg	14	dsl	3600	G-D 1500M	3600	25
Grace France Drlg	5	el	2400	Olwl 760E	2400	17
Tesoro Drlg	3	dsl	2600	Nat 1320M	2742	25
	5	dsl	2000	Nat 80B	1650	15
ESCAMBIA						
Exeter Drlg Southern	15	dsl	2550	G-D 1100	1550	18
Penrod Drlg	9	dsl	2600	Nat 1320M	3425	25
Tesoro Drlg	7	dsl	2000	Nat 80B	1650	15
Wilson Bros Drlg	2	dsl	1900	Nat 110	1900	20
GREENE						
Resource Drlg	RD10	dsl	2330	Nat 110	2740	18
HALE						
Crescent Drlg	7	dsl	1750	Beth Toro	2000	13
HOUSTON						
Penrod Drlg	19	dsl	2600	Nat 1320M	3425	25
LAMAR						
Apollo Drlg Inc (TX)	1	dsl	500	Nat 370	550	10.5
	5	dsl	500	Nat 370	550	10.5
Lohmann Drlg	5	dsl	600	Nat 50A	600	10
	8	dsl	300	Nat 32	550	7.5
MOBILE						
Exeter Drlg Southern	27	dsl	2800	G-D 1500	2800	25
Noble Drlg	25	el	3300	Nat 1625DE	3135	30
Penrod Drlg	6	dsl	3425	Nat 1625M6	2200	30
	7	dsl	3425	Nat 1625M6	2200	30
Resource Drlg	RD-22	dsl	3105	Nat 1320	3740	25
ST CLAIR						
Helmerich & Payne	111					

ALASKA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ANCHORAGE						
Brinkerhoff-Signal	36	dsl	4000	Nat 110	1800	16
Nabors Alaska Drlg	28-E	d-e	2000	Emsco Electrohoist IIC	3700	25
KENAI						
Brinkerhoff-Signal	31	dsl	800	Nat T20	300	6.5
	43	dsl	3600	Olwl 96	1800	16
	54	dsl	3600	Nat 110UE	1800	18
	58	dsl	2000	Wils 120	1200	16
	59	dsl	3600	Olwl 96	1800	16
Rowan Drlg-US	29	dsl	1850	Nat 110	2400	20
NORTH SLOPE						
Alaska United Drlg	WWS-1	d-e	1000	Olwl 700E	700	10
	1	d-e	2000	Olwl 840E	1500	18
	2	d-e	3200	Olwl 2000	2000	20
	3	d-e	3200	Olwl 2000E	2000	20
Brinkerhoff-Signal	Pf4JVI	dsl	4000	Olwl E2000	2000	18
	84	dsl	4000	Nat 110	2000	16
Nabors Alaska Drlg	17	dsl	2000	Olwl 860	2475	19
	25	dsl	2000	Nat 110	2475	20
	1-ES	d-e	500	Emsco Electrohoist CII	2400	20
	18-E	d-e	2000	Emsco Electrohoist	3200	25
	22-E	d-e	3200	Emsco IIC Electrohoist	3200	25
	26-E	d-e	3200	Emsco Electrohoist	4000	25
	27-E	d-e	3200	Emsco Electrohoist	4000	25
Parker Drlg	95	dsl	2600	Nat 130	3000	18
	96	dsl	2600	Nat 130	3000	20
	97	dsl	1400	Nat 80B	1400	15
	122	dsl	1800	OIME SL1500	1800	18
	123	dsl	1800	OIME SL1500	1800	18
	128	dsl	1400	OIME TBA2000	1400	15
	141	dsl	2700	OIME E2000	3000	18
	147	dsl	1400	OIME TBA2000	1400	15
	178	d-e	3200	OIME 2000E	2000	20
	191	dsl	3200	OIME 3000E	3000	20
Rowan Drlg-US	26	dsl	2000	Nat 110	1590	18
	33	d-e	1600	Nat 1320UE		20
	34	d-e	2000	Nat 110EH Special	3000	17
	35	d-e	2000	Nat 110EH Special	3000	17
	41	dsl	3200	Nat 1320UE	3300	25

ARIZONA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
APACHE						
Stewart Bros Drlg	51	dsl	324	Fail 2500	324	3
NAVAJO						
Stewart Bros Drlg	53	dsl	324	G-D 15W	324	1.5

ARKANSAS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Astro Drlg	20	dsl	550	Cbot 550	456	8.5
Justiss Oil	9	dsl	800	Emsco GC500	1200	12.5
	21	dsl	800	Emsco GB500	1000	12
Shuler Drlg	4	dsl	700	Emsco GB350	700	8.5
SH & J Drlg	1	dsl	807	CRDW 0	800	10
	2	g-b	885	S/B N7	750	9.5
Transcontinental Drlg-Magnolia	4	gas	700	Emsco GB500	700	9.5
	7	dsl	1020	Olwl 76	1020	12.5
	54	dsl	800	Nat 50A	980	10
	86					
	94					
Unit Drlg & Expl	6	dsl	600	MC U15	800	11
COLUMBIA						
Butler-Johnson	10	dsl	1500	G-D M800	1500	14
Noble Drlg	N-59	dsl	800	Nat 55	800	12
Rogers Drlg	2	dsl	550	S-H 7000	650	9.3
Sawyer Drlg & Serv	6	gas	1200	S/B N75	1200	13
Shuler Drlg	6	dsl	950	Wils SG	950	10.5
	9	dsl	475	S-H 7000	750	7
CONWAY						
Grace Miller Drlg	108	gas		MC U15	450	8.5
	120	gas		S-H 7000	390	8
CRAWFORD						
Grace Miller Drlg	121	gas		S-H 7000	390	8
DREW						
Murco Drlg	2	dsl	2200	Olwl 760E	1000	15
FRANKLIN						
FWA Drlg	6	dsl	900	Wils 75	720	10
HASKELL						
Alexander Drlg	4	dsl	450	W-N 250H40	425	7
Astro Drlg	19	dsl	912	Wils Super Giant	912	12.5
JOHNSON						
Dual Drlg	6	dsl	600	Emsco GB350	560	7.5
Grace Miller Drlg	105	gas		S-H 7000	390	8
	115	dsl		S-H 7000	600	8
Moran Drlg, E W	16	dsl		S-H 7000	400	9.5
LAFAYETTE						
Owen Drlg	7	dsl	1100	Idco H35	504	7
	8	dsl	300	Wils Super38	220	3.5
Shuler Drlg	5	dsl	325	Beth	350	5/ 3.5''
SH & J Drlg	3	dsl	807	Unit 34	350	7.3
Transcontinental Drlg-Magnolia	22	dsl	750	S/B N7	750	11
LOGAN						
FWA Drlg	31	dsl	1000	Wils Mogul 42	750	7.5
Grace Miller Drlg	102	gas		MC U15	1080	12
	103	gas		Nat 50	500	10
	119	dsl		BDW 650	800	12
MILLER						
D B Drlg	21	dsl	750	S/B N4	450	8
OUACHITA						
Shuler Drlg	1	dsl	325	S/B N4	350	5
PERRY						
Santa Fe Drlg	95	d-e	2800	Olwl E2000	1500	20
POPE						
Astro Drlg	22	dsl	920	Beth M58	920	12
	23	dsl	1050	Cbot 2550	1040	15
Dual Drlg	8	dsl	1250	Wils 75	750	9.5
Grace Miller Drlg	107	gas		MC U15	400	8.5
	111	gas		S-H 7000	390	8
Ladrido Drlg	2	dsl	1000	MC U15	1050	12
	3	dsl	1350	MC U15	1050	12
SCOTT						
Henley Drlg	3	dsl	4000	S/B N12A	2700	25
	4	dsl	4000	Emsco C2	2000	25
SEBASTIAN						
Astro Drlg	48					
C E C Drlg	3	dsl	1200	G-D 500	800	12
	4	dsl	1400	G-D 500	800	12
Grace Miller Drlg	104	gas		Nat 50	520	8
	106	dsl		Beth 650	1000	13
	109	dsl		BDW 900	1290	15
	110	dsl		OIME SL1500	1500	18
UNION						
Shuler Drlg	7	dsl	360	S-H 6000	570	6
	8	dsl	475	S-H 7000	540	7

CALIFORNIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Atlantic Oil	16	dsl	1650	Nat 130	2475	20
Cal Pacific Drlg	1	d-e	1200	Sup 700UE	700	10
	2	d-e	1200	Sup 700UE	700	10
	4	d-e	1950	Sup 1000UE	1000	12.5
	5	d-e	1950	Sup 1000UE	1000	12.5
	6	d-e	1950	Sup 1000UE	1000	12.5
	8	d-e	2000	Emsco C1Type2	1500	16
California Prod Serv	D-3	dsl	300	Idco H37D	461	4.5
	D-4	dsl	500	Hoop MTA	461	4.5
	D-7	dsl	1000	Hoop MTA	654	6.5
Hunnicutt Camp Drlg	2	dsl	1520	Olwl 660	880	12.5
	3	dsl	1400	Nat CA50	640	10.5
	4	dsl	1400	Olwl 66	640	11
	5	dsl	960	Idco 525	480	9
	6	d-e	4000	Nat 110	2000	18
Loffland Bros	98	d-e	2000	MC U40E	1600	13
Scandinavian Montgomery Drlg	3	dsl	1200	Nat 75	700	12
	8	dsl	1200	Nat 75	700	12
	11	dsl	1500	Emsco GB800	1500	12
BUTTE						
Bawden Drlg	11	d-e	1600	Emsco A800WE	1000	14
COLUSA						
Atlantic Oil	12	dsl	850	Nat 50A	680	9
	15	dsl	1020	Nat T32	340	7.5
Owens Serv, Jack	4	dsl	300	Idco H35	318	4
FRESNO						
Republic Drlg	22	dsl	1900	MC U36A	950	10
GEYSERVILLE						
Atlantic Oil	6	dsl	810	Nat 80	1680	14
GLENN						
Atlantic Oil	11	dsl	1350	Nat 80	1350	14
HUMBOLDT						
Brinkerhoff-Signal	32	dsl	1000	Emsco GC350	465	8
IMPERIAL						
Brinkerhoff-Signal	56	d-e		Emsco A110E	2700	18
Cleveland Drlg	6	d-e	2400	Nat 110UE	1500	20
Monterey Drlg	B	d-e	1000	Nat 80B	2000	14
INYO						
Loffland Bros	217	gas	1600	MC U914C	1900	18
KERN						
Atlantic Oil	2	dsl	1260	Nat 55	1260	11
	3	dsl	680	Idco H40	370	7.5

CALIFORNIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
KERN (Cont'd)						
Atlantic Oil	4	dsl	900	Nat 55	900	10
	5	dsl	680	Nat 50A	680	9
	8	dsl	1020	Nat T32	370	7.5
	10	dsl	1020	Nat T32	370	7.5
Brinkerhoff-Signal	8	g-b	1000	G-D 800	1000	14
California Prod Serv	M-17	dsl	300	Crdw K200C	308	4
	M-70	dsl	446	Idco H35CKD	424	4
	M-71					
Cardinal Drlg	27	dsl	1200	Emsco GC500	1200	12.5
	29	dsl	800	Emsco GA500	1200	10
Cleveland Drlg	2	dsl	600	S/B RR400	450	5
	3	d-e	2000	Nat 100	1500	18
	4	dsl	1200	Nat 75CA	800	12
	7	dsl	1000	Nat 75	800	12
	8	dsl	800	Idco 750	700	10
Coastal Drlg	7	dsl	2000	Emsco J750	825	11.5
	8	dsl	900	Olwl 52T	550	7.5
Dahlquist Drlg	1	dsl	450	Tson 3000	225	3
	5	dsl	360	Fail 2000	200	2
Gary Drlg	D-10	dsl	628	Hoop	400	5.5
	D-11	dsl	600	Emsco C50	600	8
	D-12	dsl	382	Emsco GB160T	300	4.5
	D-13	dsl	450	Emsco GB16T	300	4
	D-14	dsl				
	D-16	dsl				
	D-2	dsl	800	Nat T45	600	9
	D-30	dsl	300	Idco 35		
	D-4	dsl	475	Emsco GB160T	450	4.5
	D-5	dsl	382	Hoop GT34	300	2.5
	D-6	dsl	600	Emsco GB160T	400	4.5
	D-7	dsl	381	Gary	200	2
	D-8	dsl	450	Emsco GB160T	400	4.5
	D-9	dsl	628	Cbot	400	5.5
	1	dsl	450	Hoop	400	5
	14	dsl	800	Gary	640	9
Golden State Drlg	D-10	dsl	750	Custom HT	450	5.5
	D-2					
	D-4					
	D-6	dsl	750	Custom HT	450	5.5
	D-8	dsl	750	Chal 78	450	5.5
Hylton Drlg	1	dsl	400	Nat T12	300	4
	4	dsl	380	HT MR10	150	3
	5	dsl	380	Idco H30	300	5
	7	dsl	300	Nat T12	380	4
	8	dsl	380	Idco H30	300	5
	9	dsl	400	Idco H30	300	5
Kellogg & Sons, K L	40	el	850	Nat 610	750	12.5
	41	el	850	Nat 75	1000	14
Kenai Drlg	5	dsl	1100	Nat T32	400	6.5
	6	dsl	850	Emsco J750	800	8
	34	dsl	1030	Emsco GB350	600	7.5
Loffland Bros	125	d-e	2180	MC U914	2200	18
	185	gas	1600	MC U914C	1900	18
Marlin West	Marlin 11	d-s	2000	Nat 110	1600	18
	Marlin 12	d-s	200C	Nat 110	1600	18
	13	d-s	2000	Nat 110UE	1600	18
Montgomery Drlg	8					
	9					
	12	dsl	2000	Emsco GB800	75	12
	14	dsl	1200	Olwl 66	700	10.5
	16					
	17	d-e	2000	Olwl 940E	2000	20
	18					
NECK Drlg	1	gas	350	Wils Super	350	4
	2					
KINGS						
Coastal Drlg	1	dsl	550	Crdw KM250	250	5.5
Montgomery Drlg	10					
	19					
Scandinavian Montgomery Drlg	9	d-e	2200	Nat 1320UE	3000	22
LAKE						
Brinkerhoff-Signal	87	dsl	2000	Nat 80UE	2000	26
Loffland Bros	25	d-e	2160	MC U914CE	2200	18
	50	d-e	1420	MC U712A	1600	17
	92	d-e	2160	MC U914CE	2200	18
LONG BEACH						
Bawden Drlg	22	d-e	700	Emsco M58	800	10
LOS ANGELES						
Bawden Drlg	38	d-e	1800	Olwl 940E	1500	16
Big Chief Drlg	18	dsl	500	Hoop GXXTA	450	6
California Prod Serv	M-72	dsl	500	Idco H35CKD	424	4
	M-73	dsl	370	Idco H35CKD	424	4
Cleveland Drlg	5	dsl	2400	Idco Super 711E	1600	18
Gary Drlg	15	dsl	800	Gary	640	9
Monterey Drlg	C	d-e	1000	Nat 100ME	1500	16
	F	d-s	500	Idco H30E	500	8
Republic Drlg	6	dsl	636	Idco H40	475	5.5
	11	dsl	636	Idco H30	318	3.5
	16	dsl	636	Idco H35	318	4
	17	dsl	1100	Cbot 1287	636	7
Thompson Drlg	2	dsl	800	Emsco D550T		6.5

CALIFORNIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
MONTEREY						
Loffland Bros	328	dsl	2180	Nat 130	2400	22
Melton Drlg	3	dsl	500	Emsco 160	350	4
ORANGE						
Bawden Drlg	27	d-e	1500	Emsco A550E	1000	12
RIO VISTA						
Bawden Drlg	18	d-e	2300	Nat 110M	150	16
SAN JOAQUIN						
Montgomery Drlg	7	dsl	1200	Nat 75	700	11
SAN LUIS OBISPO						
Brinkerhoff-Signal	90	dsl	4000	G-D 1500E	2000	25
Gary Drlg	D-3	dsl	628	Emsco G350	600	8
Kenai Drlg	4	dsl	900	Idco H40D	400	7
SAN MATEO						
Montgomery Drlg	15	d-e	2000	Nat 75CB	1000	14
SANTA BARBARA						
Bawden Drlg	50	d-m	1500	Nat 55	700	11
Kenai Drlg	7	dsl	800	MAC 400	425	7
	8	dsl	825	W-M T4054	425	7
	9	dsl	825	Idco H40	400	6.5
	24	d-e	1600	Nat CAE-75	1000	12
Montgomery Drlg	3					
SOLANO						
Atlantic Oil	7	dsl	1020	Nat T32	450	7.5
Bawden Drlg	23	d-e	1700	Emsco A800WE	1000	14
Loffland Bros	232	dsl	1000	MC U15	1000	12
Monterey Drlg	D	d-s	700	S/B N75	700	10
Owens Serv, Jack	6	dsl	300	Idco H35	300	4
	8	dsl	1800	RMI 750	870	10
SONOMA						
Brinkerhoff-Signal	81	d-e	2100	Olwl 760E	2100	16
	83	d-e	2000	Emsco D3	2000	16
Loffland Bros	27	d-e	2160	MC U20	2200	17
	105	d-e	2160	MC U914EC	2200	18
	306	gas	1150	S/B N95	1300	17
TEHAMA						
Hunnicutt Camp Drlg	1	dsl	950	Nat T32	320	9
VENTURA						
Bawden Drlg	10	d-e	2300	Olwl 940E	1500	18
	24	d-e	1550	Nat 80E	1000	14
Cal Pacific Drlg	3	d-e	1200	Sup 700UE	700	10
	7	d-e	950	Sup 700UE	700	7.5
Kenai Drlg	29	dsl	1200	Wils Giant	1200	10
	30	dsl	800	Idco H40	400	6.5
Loffland Bros	16	dsl	1900	MC U914C	2000	18
	212	gas	2000	MC U914A	1600	18
Monterey Drlg	A	d-e	1000	Idco 1040E	2000	18
Montgomery Drlg	1	d-e	3200	Nat 1320UE	3645	25
	2	d-e	2000	Olwl 940E	3000	18
Republic Drlg	20	dsl	2400	S/B N95	1800	18
	21	dsl	2100	Nat 55	1200	12
YOLO						
Atlantic Oil	14	dsl	1020	Idco H		6.5
Owens Serv, Jack	2	dsl	200	Idco H38	350	4
	7	dsl	1100	Coop 350	450	7.5

COLORADO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Bow Island Drlg	37	dsl	278	W-N 2000	175	3
	38	dsl	278	W-N 2000	175	3
Toltek Drlg	1	dsl	440	S/B N4	440	8.5
ADAMS						
Allison Bros Drlg	1	dsl	500	Idco BIR800	800	12
Exeter Drlg Northern	23	dsl	500	MC U15	750	8.7
Gibson Well Serv, J W	98	dsl	700	Sup	700	10
Western Well Drlg	3	dsl	350	Fail	350	4
BACA						
Murfin Drlg	22	dsl	600	Nat 370	600	7.5
BOULDER						
Exeter Drlg Northern	22	dsl	500	MC U15	750	9.5
Tower Drlg	2	dsl	1000	Troy 600	600	10
CHEYENNE						
Gibson Well Serv, J W	93	dsl	450	Cbot M1287	450	6
Murfin Drlg	14	dsl	400	Nat T45	700	8.5
Sage Drlg	1	dsl	350	Nat T32	500	7

COLORADO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
DOLORES						
Arapahoe Drlg	4	g-b	700	Nat 50A	500	12
GARFIELD						
Four Corners Drlg	3	dsl	1500	Crdw KB500	700	8
Veco Drlg	1	dsl	400	Fail 90	400	5
	5	dsl	1400	OIME 750	950	11
HUERFANO						
Nicor Drlg	38	dsl	1150	G-D 500	650	11
KIOWA						
Murfin Drlg	25	dsl	800	Nat 370	600	7.5
KIT CARSON						
Antelope Drlg	1	dsl	600	Cbot Comet 50	500	6.5
Murfin Drlg	27	dsl	475	S/B N46	580	10
LA PLATA						
Exeter Drlg	49	dsl	600	Nat 50	600	10.5
Exeter Drlg Northern	48					
Four Corners Drlg	8	dsl	1500	Crdw KB500	750	8
LARAMIE						
Toltek Drlg	2	dsl	680	Nat 50A	875	10.5
LINCOLN						
Murfin Drlg	26	dsl	475	S/B N42	580	10
LOGAN						
Exeter Drlg Northern	5	dsl	300	MC U34D	300	6
	13	dsl	350	S/B N4	300	6
	33	dsl	500	MC U15	750	8.5
Toltek Drlg	4	dsl	440	MC U34	440	7.5
MESA						
Loffland Bros	12	dsl	840	Idco Hydrair H44CSC	868	10
Veco Drlg	3	dsl	850	MC U36A	700	9
	6	dsl	1400	OIME 750	950	11
	8	dsl	800	S/B 45	750	10
MOFFAT						
Atco Drlg	5	dsl	326	Nat T32	326	7.5
Rio Grande Drlg	2	dsl	1000	Nat 80B	1500	16
Simmons Drlg	33			MC U36A	600	10
MONTEZUMA						
Loffland Bros	26	d-e	2000	MC U36	1600	11
MORGAN						
Allison Bros Drlg	2	dsl	500	Crdw KB500	600	8
Exeter Drlg Northern	4	dsl	375	Nat T32	460	7.8
PROWERS						
Murfin Drlg	12	dsl	400	Beth C50	600	8
RIO BLANCO						
All Western Drlg	4	dsl	1500	Sup 700	750	10
Cardinal Drlg	4	dsl	560	Emsco GB350T	760	8.5
Manning, R L	11	dsl	720	Nat 370	720	8.5
	19	dsl	925	Beth M58	980	10
	20	dsl	1050	Emsco J1000	1290	14
Nicor Drlg	44	d-e	1500	G-D 500E	650	11
Parker Drlg	56	dsl	1000	OIME SD5	1000	12.5
	148	dsl	1000	OIME 750	1000	13
Shelby Drlg	53-E	d-e	1000	Nat 370ESCR	700	10
RIO GRANDE						
Dual Drlg	34	d-e	2000	Emsco D3	1000	16
WASHINGTON						
Allison Drlg	3	dsl	360	Crdw KB500	380	7.5
Gibson Well Serv, J W	75	dsl	450	Crdw K8500	450	8
WEBB						
Toltek Drlg	3	dsl	680	S/B N4A	440	8.5
WELD						
Allison Bros Drlg	7	dsl	500	Idco BIR800	900	12
Exeter Drlg Northern	1	dsl	500	Nat 50A	750	9.5
	2	dsl	375	Emsco GA250	460	7.5
	6	dsl	330	Nat T20	300	6
	12	dsl	500	Nat T45	750	9.5
	14	dsl	375	Beth C50	600	7.8
	25	dsl	375	MC U15	500	8.5
	40	dsl	500	MC U15	750	9.5
Harpel Drlg	7					
Tower Drlg	1	dsl	550	Mac 400	400	8.5
	3	dsl	600	S/B N45	500	9
	4	dsl	600	S/B N46	800	10

COLORADO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
YUMA						
Western Well Drlg	1	dsl	350	Midway 2000	350	2.5
	2	dsl	350	Fall H2000	350	3.5

FLORIDA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
COLLIER						
Penrod Drlg	105	dsl	1575	Nat 80B	1760	15
	108	dsl	1000	Nat 80B	1760	15
SANTA ROSA						
Dual Drlg	22	dsl	2700	Nat 1320M	2000	28
Penrod Drlg	15	dsl	3000	G-D 2100	2200	30

IDAHO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
BEAR LAKE						
Parker Drlg	92	dsl	1650	Nat 100M	1650	16
CARIBOU						
Loffland Bros	57	d-e	1800	Nat 80B	2000	16
Parker Drlg	112	dsl	3000	Idco E3000	3000	30
CLARK						
Molen Drlg	6	d-e	3000	Emsco C1 Type II	2000	22

ILLINOIS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Gallagher Drlg	4	dsl	500	Beth S45E	475	6
CLAY						
Precision Expl	3	dsl	400	Nat T16	470	6
Smith Drlg	11	dsl	450	Nat T20	450	6
Wilson Inc, Les	12	dsl	500	Idco H35	400	5
EDWARDS						
Mitchell Drlg	3	dsl	400	MAC 300	300	4.2
Precision Expl	4	dsl	400	Nat T20	400	6
Smith Drlg	9	dsl	320	S/B N4	450	6
Wilson Inc, Les	17	dsl	500	Idco H37	550	6
FAYETTE						
Smith Drlg	7	dsl	500	G-D 2500	360	3
HAMILTON						
Big Seven Drlg	7	dsl	450	Emsco GB250	400	6
Smith Drlg	3	dsl	320	S/B N4	550	6
JEFFERSON						
Mitchell Drlg	9	dsl	600	G-D 500M	600	10
LAWRENCE						
Smith Drlg	12	dsl	500	Chal M320	425	5
RICHLAND						
Precision Expl	1	dsl	400	Nat T20	470	6
	5	dsl	400	Nat T20	385	6
WABASH						
Davis Drlg	1	dsl	300	Wils Mogul 38	300	3.5
WASHINGTON						
Oelze, Elmer Jr	1	dsl	475	Lee 650	475	8.5
	2	dsl	475	W-N 25040	380	6
	3	dsl		W-N S34A	160	5
	4	gas		Crdw HL	140	4
WAYNE						
Barr Drlg	1	dsl	671	Nat T12	335	4.5
Mitchell Drlg	5	dsl	400	S/B N4	400	6
Precision Expl	2	dsl	400	WEIS W-45	400	6.5
Wilson Inc, Les	15	dsl	500	Idco H35	400	5
WHITE						
Harris Drlg	4	dsl	500	Nat 50	380	6
Mitchell Drlg	6	dsl	400	Wils Super 38	400	6
Wilson Inc, Les	11	dsl	300	Idco H35	450	5

INDIANA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Kendall Drlg	3	dsl	450	S/B N4	300	5.5
DUBOIS						
Mitchell Drlg	4	dsl	400	S/B N4	400	6
GREENE						
Smith Drlg	2	dsl	250	Nat T8	320	3
KNOX						
Gwaltney Drlg	7					

INDIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
POSEY						
Kendall Drlg	2	dsl	450	S/B N4	350	5.5
Mitchell Drlg	1	dsl	400	Beth SN45	400	6
VANDERBURGH						
Harris Drlg	1	dsl	500	Nat T12	360	4
J-V Drlg	8	dsl	145	Speedstar SS15S	145	1.6/3.5"
	9	gas	85	Cbot	85	6/2.88"
VERMILLION						
J-V Drlg	6	dsl	145	Speedstar SS15S	145	1.6/3.5"
WARRICK						
Gwaltney Drlg	1	dsl	300	Nat T12	225	3

KANSAS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Abercrombie Drlg	12	dsl	365	Beth Freeze	300	5.5
Bergman Drlg	1	dsl	350	Emsco	350	5.5
Rains & Williamson Oil	4	dsl	400	S/B N4	450	5.5
	5	dsl	400	Idco H40	525	7
	11	dsl	300	S/B	500	4.5
Ram Drlg	5	dsl		Nat T16		8
Sweetman Drlg	1	dsl	800	Nat 370	800	9
BARBER						
Allen Drlg	5	dsl	525	Nat 370	600	7
Beredco	2	dsl	525	Nat 370	575	7
Damac Drlg	1	dsl	350	Wils Giant	350	6
Leben Drlg	7	dsl	500	G-D 3000	500	7
Wheatstate Oilfield	1	dsl	340	Idco H35	525	6
	2	dsl	450	Mini-Max 15	450	6.5
BARTON						
Abercrombie Drlg	11	dsl	600	Emsco 350	700	7.5
Allen Drlg	3	dsl	375	Idco H25	480	5
J W Drlg	1	dsl	370	MC U15	370	6
Lauck Oil	2	dsl	350	S/B N45	400	6
Ram Drlg	4					
Red Tiger Drlg	4	dsl	700	Idco H55	700	5.5
Rockhold Engr	3	gas		Crdw RL	150	
BUTLER						
Brandt Drlg	3	dsl	350	W-N R4	330	3.5
Edco Drlg	7	dsl	475	Crdw KB200	375	4.5
Range Drlg	1	dsl	380	Cbot SAL4500	440	3.5
White & Ellis Drlg	4	dsl	300	Emsco GA250	300	5
	5	dsl	300	Emsco GA150	475	4
CHAUTAUQUA						
Edco Drlg	6	dsl	125	Davey	235	7.5
CLARK						
Eagle Drlg	1	dsl	600	Nat 370	650	7
H30 Drlg	12	dsl	300	Crdw V450	525	6.5
Murfin Drlg	19	dsl	525	Wils Super Mogul 42	525	6.5
Pickrell Drlg	1	dsl	450	MC U15	450	6.5
Rine Drlg	8	dsl	700	S/B N55	700	8.5
Sage Drlg	9			Nat T32		6.5
Zenith Drlg	6	dsl	800	Emsco 350	400	9
CLARKE						
Aldebaran Drlg	3	dsl	525	Idco	600	7.2
COFFEY						
Edco Drlg	2	dsl	375	Sullivan 300A	318	3
COMANCHE						
Aldebaran Drlg	2	dsl	525	Nat T32	500	7.2
COWLEY						
Edco Drlg	4	dsl	375	Sullivan 300	375	3
Range Drlg	2	dsl	350	Wils Giant	350	5.5
	3	dsl	350	MC U10A	350	5.5
White & Ellis Drlg	3	dsl	345	Nat T12	345	4.5
DECATUR						
Murfin Drlg	2	dsl	400	Nat T32	400	6
ELLIS						
Allen Drlg	4	dsl	375	Nat T16	525	5
Big Springs Drlg	3	dsl	450	S/B N4	450	5
Red Tiger Drlg	9	dsl	700	MC U10	700	6
	10	dsl	700	TSM 6000	700	7
FINNEY						
Cheyenne Drlg	6	dsl	630	Beth 450T	750	85
GEARY						
Kansas Drlg & Well Serv	5	dsl	750	Crdw KB200C	40	6

KANSAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
GOVE						
Murfin Drlg	21	dsl	375	Idco H35	475	6.5
Slawson Drlg	1	dsl	380	Idco H35	380	5.5
White & Ellis Drlg	9	dsl	410	S/B N46	750	10.5
GRAHAM						
Abercrombie Drlg	4	dsl	365	Idco H35	365	8
	8	dsl	365	Beth S50	365	5.5
Big Springs Drlg	2	dsl	380	Nat T32	380	5.5
Rockhold Engr	7	gas		W-N	200	
Stoeppelwerth Drlg	2	dsl	375	Emsco 250	375	4.5
GRAY						
Cheyenne Drlg	1	ds.	450	Oiwl 52T	525	6.5
HARPER						
Rains & Williamson Oil	3	dsl	525	Crdw J350	525	6.7
HASKELL						
Damac Drlg	8	dsl	400	Idco H35	450	7.5
H30 Drlg	3	dsl	280	Idco H40	312	8
Sage Drlg	3	dsl	350	Idco H40	500	8
KEARNY						
Zenith Drlg	7	dsl	600	S/B N4	400	6.9
KINGMAN						
Allen Drlg	2	dsl	375	Nat T32	525	5
Brandt Drlg	2	dsl	350	Nat 370	600	7.5
H30 Drlg	2	dsl	280	MAC 400	312	8
Pickrell Drlg	10	dsl	370	MC U15	370	5.5
White & Ellis Drlg	7	dsl	300	MC U34	475	4
KIOWA						
Abercrombie Drlg	6	dsl	365	Idco H35	365	6
Freeman Drlg	1	dsl	525	Idco H40	600	8.5
FWA Drlg	32	dsl	600	Wils Mogul 42	375	6
Gabbert-Jones	9	dsl	310	Nat T32	450	6
Lauck Oil	1	dsl	350	MC U15	400	6
LANE						
Beredco	3	dsl	500	MC U15	800	7.5
Galloway Drlg	1	dsl	300	Nat T32	300	5
Murfin Drlg	23	dsl	375	Idco H35S	475	6.5
Slawson Drlg	2	dsl	380	Idco H35	380	5.5
White & Ellis Drlg	10	dsl	410	Beth S45E	410	5
LOGAN						
Abercrombie Drlg	5	dsl	750	Idco 725	600	10
Slawson Drlg	3	dsl	480	Idco H35	480	7
MARION						
Berentz Drlg	1	dsl	350	Nat T12	350	3.5
Kansas Drlg & Well Serv	1	dsl	365	Cbot 1058	300	4
MEADE						
Damac Drlg	2	dsl	350	Wils Giant	350	6.6
MORTON						
Gabbert-Jones	11	dsl	310	Nat 370	450	6
Zenith Drlg	1	dsl	800	S/B N7A	400	10.5
NESS						
Abercrombie Drlg	9	dsl	365	Beth Breeze	365	5.5
Aldebaran Drlg	4	dsl	550	S/B N42	500	7.2
Allen Drlg	1	dsl	450	Nat T32	525	5
H30 Drlg	7	dsl	280	MC Mac400	312	8
Rains & Williamson Oil	2	dsl	450	Oiwl 52-T	450	6.7
White & Ellis Drlg	8	dsl	410	Emsco 350	750	7.5
OSBORNE						
Rains & Williamson Oil	9	dsl	300	Beth	300	4.5
Red Tiger Drlg	8	dsl	700	Emsco GA250T	700	5.5
PAWNEE						
Murfin Drlg	15	dsl	400	Idco H35	475	6.5
PHILLIPS						
Red Tiger Drlg	7	dsl	700	Emsco GA250T	700	5.5
PRATT						
Aldebaran Drlg	1	dsl	525	S/B N42	600	7.2
Graves Drlg	1	dsl	100	S/B N4	400	5
H30 Drlg	5	dsl	312	Idco H35	510	6.5
Ram Drlg	3	dsl	380	Nat T12	380	4
Red Tiger Drlg	6	dsl	700	Idco H35	700	6
RAWLINS						
Murfin Drlg	3	dsl	400	Nat T25	400	6
Ram Drlg	1	dsl	1800	Idco HD35	1800	8
Stoeppelwerth Drlg	3	dsl	500	Nat 370	500	6.5
RENO						
Red Tiger Drlg	1	dsl	700	MC U15	700	6

KANSAS (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½ - In. Pipe, 1000 ft.
RICE						
Blackstone Drlg	3	del	300	BDW 450T	300	5
Red Tiger Drlg	3	del	700	Idco H35	700	5.5
ROOKS						
Abercrombie Drlg	7	del	365	MC U34	365	5
Buffalo Drlg Inc	1	del	500	S/B N4	400	6
H30 Drlg	11	del	280	Idco H30	312	5.5
Murfin Drlg	8	del	400	Mac 400	400	6
Ram Drlg	11					
Red Tiger Drlg	2	del	700	Emsco GA250	700	5.5
RUSSELL						
Ram Drlg	9					
Red Tiger Drlg	5	del	700	Unit U15	700	6
White & Ellis Drlg	2	del	425	Emsco GA250	475	4.5
SALINE						
Big Springs Drlg	1	del	380	Beth S4513	380	5
Blackstone Drlg	4	del		BDW	450T	4
McAllister Drlg	10	del	300	S/B N4	300	60
SEDGWICK						
McAllister Drlg	9	del	300	Idco H30	300	5.5
R R A Inc	1	del	335	Coop 350	325	6.5
SEWARD						
Bohannan Drlg	1	del	750	Idco 725	750	9.5
Cheyenne Drlg	4	del	600	Nat 370	600	8.5
Gabbert-Jones	8	del	450	Nat T32	450	6
Service Drlg	14	del	400	PR-1000	800	9
Slawson Drlg	4	del	6500	Idco H35	300	6
Zenith Drlg	2	del	400	Emsco 350	400	9
	4	del	1200	U15	800	13.5
STAFFORD						
Damac Drlg	7	del	550	S/B N4	375	6
Rains & Williamson Oil	7					
Wheatstate Oilfield	3	del	340	Emsco 250	425	5
	4	del	525	Emsco GB160	525	4
STANTON						
Beredco	4			Idco 525		
STEVENS						
N R G Drlg	2					
Ram Drlg	2	del	1800	Nat T12	1800	5
SUMNER						
Kansas Drlg & Well Serv	4	del	750	KREMCO K600	500	7
TREGO						
Abercrombie Drlg	1	del	365	MC U34	365	5
	10	del	365	Cbot Tri Mtd	220	4.5
Murfin Drlg	16	del	400	Emsco S45E Beth	400	6
WASHINGTON						
Grace TRG Drlg	14	d-e	2000	G-D 1100E	2400	18

KENTUCKY

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½ - In. Pipe, 1000 ft.
UNDESIGNATED						
Gallagher Drlg	5	del	300	Nat T12	310	3.5
	7	del	350	Nat T20	475	5
DAVIESS						
Kendall Drlg	1	del	450	Nat T12	300	4.0
HENDERSON						
Big Seven Drlg	11	del	380	Emsco GB160	335	4
Crescent Drlg	8	del	525	Emsco 545B	420	5
Mitchell Drlg	7	del	400	Idco H35	400	6.5
HOPKINS						
W W Corp	1	del	450	G-D 3000	450	5
JOHNSON						
Ray Resources	6	del	450	Idco DIR7015	700	8
MUHLENBERG						
Crescent Drlg	1	del	840	Beth S45E	420	7.5
WEBSTER						
Crescent Drlg	4	del	525	Emsco 545A	420	5
WHITLEY						
Norman Drlg, James R	1	del	750	I-R	450	2.5

LOUISIANA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½ - In. Pipe, 1000 ft.
UNDESIGNATED						
B-E Drlg	1	del	900	Emsco A500	900	10

LOUISIANA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½ - In. Pipe, 1000 ft.
UNDESIGNATED (Cont'd)						
Bailey Drlg	2	del	2000	Nat 80B	1950	14
Continental Drlg	3	d-e	2800	Idco E1700	1700	19
Culver Drlg	10	del	1500	Nat 110	1500	16
	14	del	2400	MC U814	2400	16
D B Drlg	10	del	720	S/B N4	450	8
Justiss Oil	27	del	700	Beth MC450	900	12
	38	del	2800	Emsco J1100	2800	20
Noble Drlg	OW-21	e-s	3300	Olwl E2000	3300	25
	OW-31	el	3135	Olwl E3000	3135	25
Santa Fe Drlg	120	d-e	3400	Emsco C311E	3000	25
Transcontinental Drlg-Magnolia	1	del	350	Emsco GB250T	350	6.5
	23	del	1000	S/B N75	1000	12
	83	del	1000	G-D 800	1000	15
ACADIA						
Bailey Drlg	6	del	3000	Nat 110M	3000	18
	21	del	500	Emsco J750	800	11
Cliffs Drlg	43	d-e	2800	Nat 1320UE	3300	25
Grey Wolf Drlg	6	d-e	3000	Emsco C11	2000	25
Harris Well Serv	24	del	316	Idco H35	316	7.5
Power Rig Drlg	20	del	1850	Idco E900	900	13
ALLEN						
Comet Drlg	10	del	1700	Cbot 900	900	10.5
Delta Drlg	31	del	2300	Emsco C1 Type III	2502	20
	35	d-s	2800	Emsco C1 Type II	3100	20
Grey Wolf Drlg	9	d-e	3000	Emsco CZ11	2000	25
Harris Well Serv	31	del	316	Coop LTD350	316	7.5
ASCENSION						
Bailey Drlg	7	del	1200	G-D 800	1200	11
Loffland Bros	167	del	2160	MC U914C	2400	20
ASSUMPTION						
CRC Mallard Well	11	del	800	Wils 90	800	11
	12	del	800	Wils 90	800	11
Goldrus Drlg	11	del	1500	S/B N12A	2000	16
Harris Well Serv	32	del	316	Idco H35	316	7.5
Wilson Bros Drlg	6	del	2800	Nat 1320	2700	30
AVOYELLES						
Helmerich & Payne	71	del	1830	Nat 1320M	1830	23
Rebel Rig #3 Ltd	3	del	500	Idco H30	400	9
Wilcox Drillers	5	del	700	Beth S45E	550	8.5
BATON ROUGE						
Penrod Drlg	110	del	1800	Nat 1625M	2200	30
BEAUREGARD						
American Well Serv & Drlg	11	del	1700	S/B H14610A	575	8
Woolf & Magee	4	del	850	Idco H35	500	10
	11	del	850	Beth S45E	500	9.5
BIENVILLE						
Butler-Johnson	1	del	1900	S/B N85	1900	15
Exeter Drlg Southern	45	del	2000	G-D 700	1000	12.5
Henley Drlg	6	del	2000	Emsco D3	1850	15
Noble Drlg	E553	del	800	Emsco A550	800	12
BOSSIER						
Butler-Johnson	5	del	1800	S/B N95	1800	20
D B Drlg	27	del	1500	Nat 50A	1000	11.5
Nowotny & Conley Drlg	2	del	2000	OIME SL-1000	1200	15
Sawyer Drlg & Serv	4	del	1000	S/B N7	1000	12.5
	9	del	800	S/B N45-M	800	10
	12	del	900	Wils Giant	900	12
CADDO						
D B Drlg	28	del	1650	Emsco EDA	1650	15
	29	del	1100	Nat 75	1100	13.5
	30	del	1100	Beth 450	1100	12.9
Lagersen Drlg	6	d-e	2000	Idco 2500E	2500	22
Wheless Drlg	1	d-s	3200	Emsco C2 Type II	2000	25
CALCASIEU						
American Well Serv & Drlg	14	del	1700	S/B HI4610A	575	10.5
Challenger Drlg	21	del	900	S/B N75	1000	12
Comet Drlg	14	del	2600	G-D 1500	2600	25
	18	d-s	2700	I-R 2550HL	1500	16
Goldrus Drlg	2	d-e	2000	Olwl E2000	2000	25
	9	del	1750	Beth M810	1560	16
Grey Wolf Drlg	10	del	2000	Emsco C1	2000	16
Loffland Bros	330	del	2400	MC U1220	2775	22
Moran Bros	174	del		Nat 110M		18
Nicklos Drlg	71	d-e	2800	Olwl E2000	2000	25
Nicor Drlg	4	del	2000	G-D 800	1000	15
	68	del	2100	MC U712A	1200	16
	79	d-m	2000	G-D 700M	700	14
Woolf & Magee	12	del	850	Idco H35S	500	10

LOUISIANA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½ - In. Pipe, 1000 ft.
CALDWELL						
H & S Drlg	2	del	1700	S/B N95	2145	14
Sawyer Drlg & Serv	5	del	1500	S/B N75	1500	13
	10	gas	1200	Whin 1000	1200	13
CAMERON						
Bailey Drlg	8	del	2000	Nat 110M	1500	20
Butler-Johnson	4	del	1200	S/B N75	1200	12.5
CRC Mallard Well	15	del	1300	Wils 90	800	14.5
	17	del	1300	Wils 90	800	14.5
	19	del	1300	Wils 90	800	14.5
Delta Drlg	97	del	2000	Emsco J1100	1560	16
Great Southern Oil & Gas	5	del	500	Wils	318	6
Grey Wolf Drlg	2	d-e	3000	Emsco C11	2000	25
	4	del	1500	Emsco GB800	800	12.5
	5	d-e	3000	Emsco EDA	2000	25
Harris Well Serv	34	del	600	Cbot 750	900	8
Power Rig Drlg	14	d-s	3200	Idco E2100	4161	25
	18	del	3200	Emsco C2	2000	25
	23	d-e	2000	Emsco C2	2000	30
CASS						
D B Drlg	18	del	174	Schf SC800	1240	12.5
CATAHOULA						
D & D Drlg	2					
	5	del	700	Beth S45E	500	8
Justiss Oil	15	del	450	Beth 45E	300	6.5
CLAIBORNE						
Butler-Johnson	8	del	2300	G-D 1500	2200	20
Nowotny & Conley Drlg	1	dm	2000	OIME SL-1800	1200	15
Sawyer Drlg & Serv	14	del	540	Duggan DSS	540	9.5
CONCORDIA						
Justiss Oil	17	del	350	Beth S45E	350	7.5
Murco Drlg	58	d-s		Sup 4000E		54
New Drlg, David	5	del	400	S-H 5000	400	6
DE SOTO						
Sawyer Drlg & Serv	8	gas	1100	S/B N7	1100	11.5
EAST BATON ROUGE						
Goldrus Drlg	10	del	1250	Beth MA610	1176	13
Helmerich & Payne	73	d-e	2835	Olwl 3000M	3400	30
Loffland Bros	21	d-e	3200	MC U1220EBD	2500	30
Nicor Drlg	32	d-e	2700	MC 1220EB	2000	25
Penrod Drlg	4	del	3425	Emsco C3	2200	30
	5	d-e	3425	Emsco C3	3200	30
EAST FELICIANA						
Goldrus Drlg	6	d-e	3400	Olwl E2000	1700	20
EVANGELINE						
Comet Drlg	8	del	1700	Cbot 1200	1200	13.5
Wilson Bros Drlg	10	del	2200	Nat 110	2100	20
IBERIA						
Great Southern Oil & Gas	37	del	1000	Idco	636	10
Harris Well Serv	28	del	316	Idco H35	316	7.5
Power Rig Drlg	8	del	800	Emsco D2	590	11
Resource Drlg	RD17	del	1560	Nat 80B	1835	14
Wilson Bros Drlg	7	del	1400	Nat 80B	1400	12.5
IBERVILLE						
Bailey Drlg	1	del	1500	S/B N75	850	12
Drillers	5	del	900	MC U15M	1200	11
Great Southern Oil & Gas	42	del	665	Idco	636	10
Grey Wolf Drlg	7	d-e	3000	Emsco C11	2000	25
Harris Well Serv	25	del	632	Idco H44	632	10
	27	del	316	Idco H35	318	7.5
	29	del	316	Idco H35	316	7.5
Resource Drlg	RD7	del	1580	Nat 80B	1835	14
JACKSON						
Butler-Johnson	15	del	1000	Nat 80B	1950	15
Dual Drlg	11	del	1850	Olwl 860	1400	18
JEFFERSON						
Comet Drlg	12	del	1700	Cbot 1200	1200	13.5
JEFFERSON DAVIS						
American Well Serv & Drlg	15	del	1700	S/B DH14610	900	12
Harris Well Serv	33	del	900	Idco H44	900	10
Loffland Bros	116	d-e	3300	MC U1220EBD	3300	30
LA SALLE						
D & D Drlg	3	del	875	S/B N45	530	8.5
Justiss Oil	37	del	200	J-M500	225	5
	39	del	300	J-M 6500	400	6.5

LOUISIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
LAFAYETTE						
Cliffs Drlg	30	dsl	2800	Nat 1320	2475	25
Delta Drlg	16	dsl	2800	Nat 130	2250	25
	47	dsl	2300	Nat 130	2250	20
	78	d-e	3200	G-D 3000RE	4800	30
	85	d-s	2800	Emaco C2 Type II	3456	25
Grey Wolf Drlg	8	d-e	3000	Emaco C2 Type II	2000	25
JFP Well Serv	6	dsl	2000	Olwl E2000	2000	25
M G F Drlg-Lafayette	41	dsl	1800	Olwl 96	1800	15
	42	dsl	1500	Olwl 96	1500	16
	44	dsl	2000	MC U814	1500	18
	401	d-e	1800	Nat 320UE	2000	25
Nicor Drlg	15	dsl	2100	Olwl 76	1000	15
Penrod Drlg	11	dsl	2800	Nat 1320M	3425	25
	14	dsl	3075	S/B N12A	1840	20
	17	dsl	2800	Nat 1320M	3425	25
	27	dsl	2800	Emaco C2	2000	25
Power Rig Drlg	12	dsl	3200	Emaco A1500M	2200	30
	17	d-e	2000	Idco E1700	2400	16
	19	dsl	3000	Emaco C3	3300	30
	22	d-e	2700	Idco E1700	1700	18
LAFOURCHE						
Cliffs Drlg	18	dsl	2800	Nat 110	2475	20
	24	dsl	2800	Nat 1320	2475	25
Comet Drlg	6	dsl	2550	Idco Super 7-11	1700	18
CRC Mallard Well	14	dsl	1300	Wils 90	800	14.5
	16	dsl	1300	Wils 90	800	14
Delta Drlg	56	dsl	2800	Wils Super 250	2582	25
	65	dsl	2300	Emaco C1 Type III	2582	18
Goldrus Drlg	7	dsl	1750	S/B N65	1560	16
	8	d-e	1750	Olwl 840E	1700	18
Grey Wolf Drlg	3	d-e	3000	Emaco EC8	2000	25
Loffland Bros	145	dsl	2965	MC U1220	2965	20
M G F Drlg-Lafayette	47	dsl	1800	Idco S711	1500	18
Nicklos Drlg	75	dsl	2000	Olwl 860M	2700	18
Nicor Drlg	11	dsl	2300	MC U1220B	2000	21
LINCOLN						
Butler-Johnson	13	dsl	1200	S/B N75B	1200	13
Rosamond Drlg	6	dsl	1275	Emaco A550	1275	12.5
Sawyer Drlg & Serv	1	dsl	700	S/B N7	700	11
	3	dsl	1100	S/B N7	1100	12
	7	gas	900	Idco 750	900	13
	15	dsl	800	MC U40D	800	14
Wheless Drlg	10	dsl	1800	Emaco C13	1800	16
LIVINGSTON						
Delta Drlg	25	dsl	2300	Emaco C1 Type III	2582	18
Transcontinental Drlg-Jackson	93	dsl	1000	G-D 800	1000	15
NATCHITOCHES						
Nowotny & Conley Drlg	5	dsl	3200	Emaco C3	3000	30
Penrod Drlg	107	dsl	1000	Nat 80B	1760	15
Wheless Drlg	3	dsl	1800	Emaco C13	1800	18
POINTE COUPEE						
Delta Drlg	82	d-s	3200	Emaco C2 Type II	3456	25
Eljay Drlg	2	d-s	2800	Olwl E2000	2000	25
	4	d-s	3400	Olwl E3000	3000	30
Goldrus Drlg	22	dsl	1250	Cbot 1000	872	13.5
Helmerich & Payne	83	d-s	2800	Olwl E2000	2000	26
Murco Drlg	46	d-s	2800	Olwl E2000	2000	30
Parker Drlg	165	dsl	3000	OIME Hercules 3000E	3000	30
	174	dsl	3000	OIME Hercules 3000E	3000	30
	180	dsl	3000	OIME Hercules 3000E	3000	30
Penrod Drlg	1	dsl	3425	Nat 1625M6	2200	30
	122	dsl	1300	Nat 1625M	2000	25
RAPIDES						
Helmerich & Payne	74	dsl	3300	Olwl	3805	30
Parker Drlg	215	gas	2200	OIME 1500C	2200	22
RAPIDS						
Justiss Oil	10	dsl	500	S/B N45	600	10
RED RIVER						
Murco Drlg	50	d-s	2200	Olwl 860E	2000	18
Sawyer Drlg & Serv	13	dsl	400	Wils Giant	400	9
RICHLAND						
Justiss Oil	8	dsl	450	Emaco GA500	900	11

LOUISIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ST BERNARD						
CRC Mallard Well	18	dsl	1300	Wils 90	800	14.5
Nicklos Drlg	32PB	d-e	3400	Olwl E2000	2000	25
Wilson Bros Drlg	9	dsl	2800	Nat 110	2700	20
ST HELENA						
Transcontinental Drlg-Jackson	14					
ST JAMES						
Comet Drlg	4	dsl	1700	S/B N75	900	12
Dual Drlg	21	dsl	2250	Emaco C1	1600	22
Power Rig Drlg	11	dsl	2700	Emaco C1	2000	25
	15	dsl	2350	Emaco C1 Type III	1950	16
ST LANDRY						
Goldrus Drlg	1	d-e	2000	Olwl E3000	3000	30
	4	dsl	1200	S/B N75	1040	14
Harris Well Serv	17	dsl	316	Idco H35	316	7.5
	18	dsl	316	Idco H35	316	7.5
	19	dsl	316	Idco H35	316	7.5
	21	dsl	316	Idco H35	316	7.5
	23	dsl	316	Idco H37	480	8
Nicklos Drlg	77	d-e	1600	Emaco C1II	1530	16
	79	d-e				
	80	d-s	4800	Emaco C3	3000	30
Nicor Drlg	63	dsl	2650	Olwl 96	1500	18
	78	d-m	2650	Nat 100	750	14
Power Rig Drlg	9	dsl	1850	Emaco D3	1450	14
ST MARTIN						
Bailey Drlg	4	dsl	2900	Nat 1320M	3000	20
Goldrus Drlg	15	dsl	1740	Beth M610	1560	16
Great Southern Oil & Gas	1		550	I-R F800		
Harris Well Serv	22	dsl	316	Idco H35	316	7.5
Helmerich & Payne	41	dsl	1650	Nat 110	1815	22
Nicklos Drlg	78	dsl	1400	Nat 80B	1080	14
	35PB	d-e	3400	Olwl E2000	2000	25
Nicor Drlg	75	d-m	1750	Cbot 2550TRD	1200	15
Power Rig Drlg	10	dsl	2800	Emaco A1500	1450	30
ST MARY						
Dual Drlg	28	d-e	3400	Olwl E3000	2300	30
Goldrus Drlg	20	dsl	1950	Cbot 1200	1054	15
Loffland Bros	103	d-e	3300	MC U1220EBD	3300	30
	114	d-e	3300	MC U1220EBD	3300	30
TANGIPAHOA						
Helmerich & Payne	77	d-e	2200	Nat 110UE	2430	18
TENSAS						
New Drlg, David	7	dsl	400	MC U34	450	7
TERREBONNE						
CRC Mallard Well	20	dsl	1300	Wils 90	800	14.5
Nicor Drlg	202	d-e	2600	Nat 1320UE	2000	25
Penrod Drlg	28	dsl	3425	Nat 1320M	2200	25
	29	dsl	3425	Nat 1320M	2200	25
VERMILION						
Cliffs Drlg	16	dsl	2600	Nat 1320	2475	25
	26	dsl	2000	Nat 110	1650	18
Delta Drlg	93	d-s	2000	Emaco D3 Type II	2582	16
Glendel Drlg	5	d-e	2000	G-D 1100E	2000	1.8
	6	d-e	2000	G-D 1100E	2000	1.8
Grey Wolf Drlg	11	dsl	3000	Olwl 860	2000	18
Nicor Drlg	34	d-e	2600	MC U814EC	1500	21
	45	d-e	2700	MC U1220EB	2000	25
	58	dsl	1600	MC U15	700	12
	67	d-e	1700	Olwl 66OE	700	15
	72	dsl	2600	Nat 1320M	2000	25
	74	d-m	2900	Nat 1320M	2000	25
	77	d-m	2300	Nat 100	750	13
	201	d-e	2600	Nat 1320UE	2000	25
Parker Drlg	175	dsl	3000	OIME Hercules 3000E	3000	30
Power Rig Drlg	16	d-s	2600	Emaco C1 Type II	3084	18
	21	dsl	3500	Emaco C2	2000	25
	24	d-e	3300	Emaco C3	3000	40
Resource Drlg	RD-30	dsl	3105	Nat 1625	3740	30
	RD1	dsl	3105	Nat 1320	3740	25
	RD11	dsl	3105	Nat 1625	3740	30
Tesoro Drlg	6	dsl	2600	Nat 1625M	2742	30
Wilson Bros Drlg	4	dsl	2600	Nat 110	2700	20
VERNON						
Resource Drlg	RD12	dsl	3105	Nat 1625	3740	30
WASHINGTON						
Chesley Pruet Drlg	6	d-e	2000	Emaco D3	1000	16
WEBSTER						
H & S Drlg	1	dsl	1700	S/B N95	2145	14
Murco Drlg	34	dsl	2200	Olwl N760	1350	15

LOUISIANA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
WEBSTER (Cont'd)						
Nelson Drlg & Well Serv	2	dsl	1000	S/B N75	1000	13
Penrod Drlg	109	dsl	2000	S/B N75A	1760	16
Rogers Drlg	1	dsl	550	S-H 7000	650	8.3
Wheless Drlg	4	dsl	1800	Emaco J1100	1800	16
WEST BATON ROUGE						
Dual Drlg	5	dsl	2700	Nat 1320M	2000	25
JFP Well Serv	4	dsl	2000	Olwl E2000	2000	25
Wilson Bros Drlg	14	dsl	2600	Nat 110	2700	20
WEST FELICIANA						
Tesoro Drlg	4	dsl	2800	Nat 1320M	2742	25
WILKINSON						
Wilcox Drillers	7	dsl	300	Beth 545A		8
WINN						
Grace Franco Drlg	8	dsl	2400	Olwl 760E	2400	17

MICHIGAN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
BAY						
Bigard Drlg	11	d-e	2000	Idco ED1200	2000	20
EATON						
Escor	5	dsl	949	Idco H35	445	5.5
GRAND TRAVERSE						
Bigard Drlg	9	dsl	1100	Idco H44	600	8.5
	15	dsl	1100	Idco H1000	1000	12
Cactus Drlg	21	dsl	1000	Beth M58	850	12
Escor	4	dsl	500	Idco DI7015	600	7.5
Nicor Drlg	21	dsl	800	Idco H35	400	7
	22	dsl	870	Idco H35	400	7.5
	24	dsl	1185	Idco H525	850	9
	52	d-m	600	S/B DH14210	550	8.4
HILLSDALE						
Bigard Drlg	7	dsl	900	Idco H37	535	7.5
	8	dsl	1100	Idco H44	600	8.5
Scott Drlg, Don	5	dsl	950	Idco H1000	900	10
KALKASKA						
Indril	6	dsl	1125	Idco 700	700	9
LIVINGSTON						
Bigard Drlg	3	dsl	1100	Cbot 550	550	7.5
MANISTEE						
Bigard Drlg	10	dsl	1200	Idco H44	600	8.5
	16	dsl	950	Idco H44	600	8.5
	17	dsl	1100	Wils 75	900	12
Cactus Drlg	17	dsl	1000	S/B N55	850	11
Indril	4	dsl	1000	Coop 550	500	8
MISSAUKEE						
Indril	2	dsl	1200	Idco H37	456	8
MONTMORENCY						
Indril	10	dsl	1200	Idco H1000	1000	12
NEWAYGO						
Bigard Drlg	14	dsl	1100	Idco H1000	1000	12
Indril	9	dsl	2100	Cbot 2550HL	1800	20
OCEANA						
Indril	5	dsl	1200	Idco 1000	1000	12
Nicor Drlg	38	dsl	750	Wils 75	640	9
OSCEOLA						
Cactus Drlg	12	dsl	1000	Olwl 66	850	10
Indril	7	dsl	1200	Idco H1000	1000	12
OTSEGO						
Cactus Drlg	16	dsl	950	Nat 50A	850	10
Indril	3	dsl	1200	Idco 1000	900	10
	8	dsl	1200	Idco H1000	1000	12
Nicor Drlg	53	d-m	750	S/B DH14210	550	8.4
TUSCOLA						
L & G Drlg	2	dsl	500	Wils 65	600	8
VAN BUREN						
L & G Drlg	1	dsl	398	Idco H35	398	5

MISSISSIPPI

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Justiss Oil	7	dsl	1800	Emaco J1400	2900	20
	16	dsl	600	Emaco GB	900	12
	22	dsl	1800	Nat 80B	1420	14
	23	dsl	1800	Emaco J1100	2400	20

MISSISSIPPI (Cont'd)

• Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED (Cont'd)						
Justiss Oil	24	dsl	3800	Emsco J1400	3000	22
	26	dsl	940	Emsco GB500	940	12
	34	g-b	700	Beth M58	1000	12
	35	dsl	1250	Emsco J1400	1200	18
Wilcox Drillers	6	dsl	1100	Emsco 550	800	12.5
ADAMS						
D & D Drlg	1	dsl	700	S/B N4A	350	8
New Drlg, David	3	dsl	400	S-H 6000	400	6
	9	dsl	400	S-H 5000	400	5
	15	dsl	1000	Idco 900	1650	16
Reuel Rig #3 Ltd	2	dsl	350	Beth S455	350	8
AMITE						
Helmerich & Payne	84	d-e	1700	Oilwl 760E	760	16
	110					
Penrod Drlg	2	dsl	2600	Emsco C2	3425	25
Woolf & Magee	3	dsl	1450	G-D 700	1275	13.5
CHICKASAW						
Transcontinental Drlg-Jackson	12					
CLARKE						
Marion Drlg	7	dsl	2400	Emsco C1	2400	20
Tesoro Drlg	2	dsl	2800	Nat 1320M	2742	20
CLAY						
Murco Drlg	54	d-e		G-D 1100E		18
FORREST						
Tesoro Drlg	1	dsl	2800	Nat 1320M	2742	25
GREENE						
Par-Co Drlg	3	dsl	700	S-H 7000	500	7
HANCOCK						
Penrod Drlg	112	dsl	1600	Nat 1625M	3000	30
HINDS						
Quarles Drlg	14	dsl	2700	MC U814C	2400	22
JASPER						
Delta Drlg	86	d-e	2800	Emsco Electrohoist II	3456	18
Exeter Drlg Southern	26	dsl	2500	Nat 95	2500	17.5
Grace France Drlg	2	dsl	1700	Oilwl 780	1700	17
Marion Drlg	8	d-e	2400	Emsco C1	2400	20
Murco Drlg	18	dsl	2800	MC U1220	2400	25
Par-Co Drlg	4	dsl	700	Wils 42	500	8
JEFFERSON DAVIS						
Murco Drlg	22	dsl	2400	S/B N95	2400	20
JONES						
Chesley Pruet Drlg	9			Emsco D3 Type II	1000	
	12	dsl	3800	Emsco C2	3800	25
	15	dsl	4800	Emsco C3	4800	30
	16	dsl	3800	Emsco C2	3800	30
Marion Drlg	4	dsl	2400	Emsco C2	2400	25
Murco Drlg	26	dsl	2800	Oilwl N2000-B	3000	30
New Drlg, David	12	dsl	500	Beth	800	12
	14	dsl	2000	Emsco C2	2700	25
Penrod Drlg	24	dsl	2600	S/B N12A	1950	25
Tesoro Drlg	8	dsl	3200	Nat 1320	3800	30
Transcontinental Drlg-Jackson	18					
	84					
	85					
LAMAR						
Marion Drlg	1	dsl	1800	Emsco M810	1800	18
LAWRENCE						
Transcontinental Drlg-Jackson	92					
LOWNDES						
Chesley Pruet Drlg	5	dsl	950	Nat 370	950	12
MARION						
Exeter Drlg Southern	32	dsl	2800	G-D 1500	2800	25
Marion Drlg	2	dsl	2400	Emsco C1	2400	20
PEARL RIVER						
Chesley Pruet Drlg	4	d-e	4000	Emsco C1	2000	25
Delta Drlg	96	d-e	2600	Emsco C1 Type II	3456	20
Helmerich & Payne	75	dsl	3300	Nat 1625M	3645	30
Penrod Drlg	10	dsl	2600	Nat 1320M	3425	25
PIKE						
Murco Drlg	10	dsl	2200	S/B N95	2400	20
PONTOTOC						
Lohmann Drlg	9	dsl	300	Nat T12	300	3.5

MISSISSIPPI (Cont'd)

• Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
RANKIN						
Helmerich & Payne	72	dsl	2835	Oilwl 3000M	2835	30
SIMPSON						
Chesley Pruet Drlg	3	d-e	4000	G-D 1500E	2000	25
Helmerich & Payne	86	d-e	4250	Nat 1625DE	4250	30
Marion Drlg	5	dsl	2400	Oilwl M2000	2400	25
SMITH						
New Drlg, David	8	dsl	1500	Nat 80B	1500	[illegible]
	10	dsl	500	Emsco GB500	800	12
SUNFLOWER						
New Drlg, David	11	dsl	500	Emsco GB500	800	12
WARREN						
Exeter Drlg Southern	16	dsl	2600	G-D 1500	2800	25
Penrod Drlg	12	dsl	3850	G-D 1500	2120	20
WAYNE						
Chesley Pruet Drlg	2	dsl	1800	Emsco GB500	1200	14
Murco Drlg	14	d-e	3200	G-D 1500	2800	25
Noble Drlg	E1102	dsl	1870	Emsco A1100	1870	18
WILKINSON						
Energy Drlg	3	dsl	2000	Emsco D3	2000	18
Penrod Drlg	120	dsl	1600	Nat 1625M	3000	30
Transcontinental Drlg-Jackson	91					
YAZOO						
Marion Drlg	6	dsl	3300	Emsco C3	3300	30
Par-Co Drlg	1	dsl	300	Idco H30	300	6

MONTANA

• Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Comanche Drlg Co	2	dsl	430	Idco H30	400	5
	5	dsl	430	Idco H30	400	5
Noble Drlg	814	dsl	1606	Nat 80B	1606	15
CARBON						
Cardinal Drlg	11	dsl	864	BOW 800	1140	14
DANIELS						
Grace Bomac Drlg	31	dsl	630	Beth S45E	370	8
Nicor Drlg	26	dsl	1100	Nat 50A	425	11.5
Spartan Drlg	11	d-m	800	Sup 700	700	11
DAWSON						
True Drlg	22	dsl	1200	Nat 55	1200	13
FALLON						
Atco Drlg	17	d-e	1200	Nat 610E	120	12
Cliffs Drlg	6	dsl	1600	Nat 610	1100	12.5
Dixilyn-Field Drlg	37	dsl	1600	Nat 80UE	2000	15
Spartan Drlg	19	d-m	800	Sup 700	700	11
	26E	d-e	700	Idco 725E	1000	10
FLATHEAD						
Molen Drlg	5	dsl	1200	S/B N46	800	12
Parker Drlg	188	d-e	3000	OIME 3000E	3000	30
GALLATIN						
Cardinal Drlg	17e	d-e	2000	Emsco D3	2000	18
GLACIER						
Anderson-Myers Drlg	8	dsl	1800	Nat 80	1800	16
Simmons Drlg	31	dsl	350	S-H 6000	350	6.5
HILL						
Elenburg Expl	5	dsl	320	W-N CC2000	180	2.5
K B Drlg & Prod	1			Coop		
	2	dsl	350	Wils Mogul	350	5
KIOWA						
Challenger Drlg	31	dsl	1200	S/B N75	1200	12
LEWIS & CLARK						
Cardinal Drlg	16e	d-e	2000	Emsco D3	2000	18
MADISON						
Cardinal Drlg	10	dsl	1296	Emsco GB800	1296	13.5
MC CONE						
Anderson-Myers Drlg	3	dsl	1200	Emsco G500	1200	11
MUSSELSHELL						
Elenburg Expl	10	dsl	320	Elenburg	430	6
Simmons Drlg	41	dsl	350	Hycalog HH6000	350	6.8

MONTANA (Cont'd)

• Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
PETROLEUM						
Simmons Drlg	46	dsl	350	Troy M800	380	7.5
PHILLIPS						
Elenburg Expl	8	dsl	320	W-N CC2000	230	2.5
PONDERA						
Elenburg Expl	3	dsl	320	W-N CC2000	230	2.5
POWDER RIVER						
True Drlg	18	dsl	350	Emsco GB250T	350	6.5
	26	dsl	800	Idco H725SC	868	10
RICHLAND						
Brinkerhoff-Signal	10	dsl	1000	MC U40	1000	13
Cliffs Drlg	14	dsl	1200	Emsco J1250	800	15
Enopco	2	dsl	1600	Nat 610	2100	14
Forewest	3	d-e	2000	Idco 1200E	1600	16
Grace Bomac Drlg	46	dsl	1125	Nat 610M	1125	12.5
	55	dsl	1500	G-D 800M	1500	16
Helmerich & Payne	88	dsl	1815	Oilwl 860	1815	16
Noble Drlg	N-84	dsl	1320	Nat 80B	1320	15
ROOSEVELT						
Burris Drlg	115	dsl	1200	Sup 700	650	10
Cardinal Drlg	22	dsl	1554	Nat 80B	1554	15
Drilcon	1	dsl	1125	Beth 450	1125	11
Grace Bomac Drlg	34	dsl	1000	S/B N7	1000	10
ROSEBUD						
Elenburg Expl	11	dsl	430	Elenburg 6000	430	6
Molen Drlg	1	dsl	400	Emsco GB250T	350	6.5
Simmons Drlg	47	dsl	350	Troy M800	350	7.5
SHERIDAN						
Burris Drlg	103	dsl	1000	G-D 700	1000	14.5
Grace Bomac Drlg	37	dsl	1000	G-D 700M	1000	12.5
	39	dsl	1000	S/B N75	1000	12.5
	54	dsl	1125	Nat 610M	1125	12.5
Noble Drlg	N-810	dsl	1606	Nat 80B	1606	15
	N-89	dsl	800	Nat 80B	800	13
STILLWATER						
Anderson-Myers Drlg	6	dsl	1800	Emsco GB800	1800	15
	11	dsl	1200	Nat 55	1200	13
Atco Drlg	56	d-e	1800	Nat 80UE	1800	16
TETON						
Molen Drlg	4	dsl	1350	S/B N75A	1350	15
TOOLE						
Alkins Drlg	2	dsl	200	B-E	200	3
Comanche Drlg Co	1	dsl	430	Idco H30	400	5
TREASURE						
Anderson-Myers Drlg	4	dsl	1200	Emsco GA500	1200	11
VALLEY						
Burris Drlg	118	dsl	650	MAC 400	500	10.5
Challenger Drlg	1	dsl	900	Emsco BC500	1000	11
	24	dsl	500	S/B N4A	650	6.5
Drilcon	5	dsl	715	Idco H725	700	11
Spartan Drlg	29	dsl	900	Idco H525	900	8.5
Westburne Drlg	59	dsl	1100	Idco M750D	800	10

NEBRASKA

• Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
UNDESIGNATED						
Stoeppelwerth Drlg	1	dsl	375	Nat T32	375	5.5
BANNER						
Banner Drlg	5					
DUNDY						
Murfin Drlg	20	dsl	525	Nat 370	600	7.5
HITCHCOCK						
Murfin Drlg	24	dsl	525	Idco H35SC	475	6.5
Rains & Williamson Oil	1	dsl	525	Beth S45-B	450	5.5
KIMBALL						
Exeter Drlg Northern	42	dsl	375	Nat T32	480	7.8
RED WILLOW						
Murfin Drlg	7	dsl	525	Nat T32	400	6
RICHARDSON						
Brandt Drlg	1	dsl	350	Beth S50	450	5

NEBRASKA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
SCOTTS BLUFF						
Banner Drlg	4	del	400	Apache 25040	375	5
SIOUX						
Banner Drlg	3	del	500	Nat T45	900	9.5

NEVADA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Continental Drlg	17	d-e	2800	Idco E1700	1700	19
ESMERALDA						
Willbros Drlg	10	d-e	3000	Idco E1700	3000	25
EUREKA						
Loffland Bros	211	del	1260	MC U15	1000	10
Penrod Drlg	20	del	2600	Nat 1320M	1950	25
LANDER						
Anderson-Myers Drlg	17	del	2300	Nat 110	2300	22
LINCOLN						
Anderson-Myers Drlg	7	del	1200	Nat 55	1400	13
Penrod Drlg	104		2000	Nat 80B	1760	15
NYE						
Brinkerhoff-Signal	9	del	550	S/B N45	600	7.5
Cardinal Drlg	2	del	864	Emsco GA500	760	10
WHITE PINE						
Brinkerhoff-Signal	3	del	1000	Nat 55	1000	12
Veco Drlg	7	del	1550	OIME 1000	1000	16

NEW JERSEY

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
SUSSEX						
New Jersey Drlg	T5	del	400	I-R	400	5

NEW MEXICO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Ard Drlg	5	del	1886	MC U20	1800	15
	6	del	1200	MC U15	1200	11.5
	7	del	1200	MC U40	1200	14
CHAVES						
Exeter Drlg Northern	64	del	1035	Unit U15	750	9.5
	65	del	1300	Emsco D2	1100	13
L & M Drlg	1	del	750	G42	440	7.5
W E K Drlg	3	del	450	Emsco S45E	440	6.5
Young Drlg	4	del	400	Crdw K500	600	8.5
CIBOLA						
Stewart Bros Drlg	52	del	324	G-D 15W	324	1.5
DONA ANA						
Bayless Drlg	7	del	1500	G-D GD700	1200	14
Parker Drlg	184	d-e	3300	OIME E3000	3000	30
Stewart Bros Drlg	45	del	324	Fail 2500	324	3
EDDY						
Artesia Fishing Tool	1	del	400	May 3000	200	4
	2	del	500	G-D	500	6
Basin Drlg	5	del	900	Emsco D2-M	820	13
Cactus Drlg	1	del	2000	Nat 110M	1650	20
	63	del	550	S/B N4	454	6
	73	del	300	MC U34	454	6.5
Dual Drlg	37	del	1800	Oiwl 500	700	10
Exeter Drlg Northern	66	del	1100	BDW 650	750	11
Kenai Drlg	21	del	1350	MC U20	1400	15
	22	del	700	Emsco J1130	1400	15
	37	del	1750	Nat 100M	1500	18
L & M Drlg	2	del	750	G-D 3000	380	6
La Rue Drlg	1	del	650	Nat T20	500	7
	2	del	500	G-D 3000	500	6
Landis Drlg	4	del	800	S/B N45	700	10
M G F Drlg-Midland	26	del	1725	G-D 1100	1725	19
McVay Drlg	4	del	850	Nat 75	850	12
	7	del	1200	Nat 75CA	1200	13
Moranco	3	del	1100	MC 712A	1000	15
	9	del	750	S/R N55	750	11

NEW MEXICO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
EDDY (Cont'd)						
Parker Drlg	34	gas	1000	Nat 75	1000	16
	161	gas	1000	Nat 75	1000	16
Rio Colorado Drlg	120		1300	S/B N65A	1700	16
Sharp Drlg	35	del	2331	Beth 1013	2742	23
Willbros Drlg	4	del	1700	Nat 55	1260	14
	5	gas	1100	Beth 450	1100	13
Wilson Bros Drlg	21	del	800	Nat 80B	1425	16
HIDALGO						
Dual Drlg	33	d-e	2800	Oiwl 840	1500	22
Willbros Drlg	1	del	1200	Oiwl 76	1200	14
LEA						
Basin Drlg	14	del	1470	G-D 700M	1220	14
Cactus Drlg	14	del	800	Oiwl 86	1200	11
	18	del	550	Nat T32	850	8
	23	del	2000	Nat 110	2550	20
	27	del	2200	S/B N20	2550	25
	60	del	550	Beth S45E	454	6
	65	del	550	S/B N4	454	6
Delta Drlg	60	d-e	1825	Emsco D3 Type II	2582	16
	98	del	1500	Wils Giant Roadair	784	12.5
Exeter Drlg Northern	67	del	1300	Emsco D2	1100	13
Grace TRG Drlg	404	del	800	Coop 750	800	9
Henley Drlg	8	del	2000	Emsco D3	1850	15
Hondo Drlg	3	del	800	Beth M58C	800	13.5
	4	del	1200	S/B N75	1200	14
	5	del	800	Nat 55C	800	13.5
	7	gas	750	S/B N55	750	11.5
	12	del	1200	G-D 800	1200	15
Kenai Drlg	11	del	400	Nat T20	400	6.5
	23	del	1800	Emsco JB1250	1400	15
	31	del	650	MAC 300	400	7
	36	del	650	Wils Giant	800	9
Lanex Drlg	C-8	d-e	1600	BDW 650	650	12
M G F Drlg-Midland	11	del	900	Beth M58	900	12.5
	23	del	1150	Oiwl 76	1150	13.5
McVay Drlg	8	gas	1200	Nat 80B	1200	15
	9	del	1400	Nat 110	1400	18
	10	del	1300	Nat 100	1300	16
Moranco	1	del	1100	OIME 1000SL	1000	15
	2	del	1100	Emsco GB800	1000	15
	5	del	750	MC U15	750	11
	6	del	750	S/B N75	750	12
	7	del	1100	S/B N75	1000	15
	10	del	100	MC	750	11
Parker Drlg	38	gas	1200	Nat 100M	1200	18
	85	gas	1600	Nat 130	1600	23
	90	gas	1800	Nat 130	1800	25
	198	gas	1600	OIME 1500C	1600	22
	211	gas	1000	Nat 75	1000	16
Quarles Drlg	2	del	1500	OIME 1000	1000	18
	15	del	2000	RMI 1000	1000	15
Resource Drlg	RD6	del	2330	Nat 110	2740	18
Rio Colorado Drlg	140	del	1200	Nat T45	900	10.5
	142	del	1825	Nat 110	1650	18
Rod Ric	2	del	450	Beth S45E	400	7.5
	10	del	670	Emsco G500	600	8.5
	11	del	450	Nat T20	440	7
Sharp Drlg	32	del	1185	Emsco 800	1482	16.5
	36	del	2331	Beth MC950	2742	22
	48	del	790	Beth M58	988	13.5
	52	del	1580	Beth M810	1836	19
	62	del	1132	Emsco D3	1272	14
	63	del	1500	Emsco D3	1836	18
	71	d-e	2331	MC U914EC	2742	23
	369	d-e	1488	MC U712EC	1995	18
Sierra Drlg Co	1	del	500	BDW Min-Max	800	10
	2	del	500	BDW 600	800	10
	3	del	500	Emsco D2	1000	13
	4	del	500	OIME SL5	1000	15
TMBR Drlg	12	del	700	Nat 50	600	10.5
Verna Corp	16	del	600	S/B N14	450	6.5
W E K Drlg	1	del	770	MC U34	380	7.5
	2	del	1200	Idco H35	480	12
Wilson Bros Drlg	19	del	800	Nat 80B	1425	16
LEE						
Landis Drlg	2	del	1000	S/B N75	1350	14
MORA						
Grace TRG Drlg	20	d-e	2200	G-D 1100E	2400	18
RIO ARRIBA						
Arapahoe Drlg	7	g-b	700	Nat T45	700	10
Four Corners Drlg	2	del	1500	Crdw KB500	700	8
	5	del	1500	Crdw KB500	700	8
	6	del	1500	Crdw KB500	700	8
	9	del	1500	Crdw KB500	750	8
	10	del	1500	Crdw	750	8
	11	del	1500	Crdw KB500	636	8
Loffland Bros	5	del	1220	Idco H1000	868	12
Nicor Drlg	41	del	2000	G-D 1100M	1500	21

NEW MEXICO (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
ROOSEVELT						
Norton Drlg	3	del	475	Wils 75	850	10.5
Quarles Drlg	4	gas	1400	Emsco GB 500	500	12
SAN JUAN						
Arapahoe Drlg	3	g-b	300	Wils Mogul	320	6.5
	6	del	300	Nat T32	350	8
	11	g-b	300	Nat T32	320	9
Bayless Drlg	5	del	1500	Coop LTO550	550	8.5
Four Corners Drlg	4	del	1500	Crdw KB500	700	8
	7	del	1500	Crdw KB500	750	8
	12	del	1500	Crdw KB500	636	8
LLL Drlg	2	del	1720	Cbot 750	880	10
True Drlg	27	del	900	Idco H725SC	900	10
Young Drlg	2	del	800	Idco DIR70	800	8.5
SAN MIGUEL						
Baker & Taylor Drlg	19	del	870	MC U15	870	11
SANDOVAL						
Brinkerhoff-Signal	78	del	1600	Nat 610	1100	12.5
UNION						
Baker & Taylor Drlg	16					

NEW YORK

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
CATTARAUGUS						
International Petr Serv	9	del	475	Chal Model 320HD	380	4.5
Union Drlg	3					
CHAUTAUQUA						
International Petr Serv	4	del	475	Wils 42	475	7.5
	7	del	475	Chal 320	380	4
	11	del		Chal 320	475	4.2
Underwater Gas Dev	3			Chal 320	300	6
	4			Challenger 320	300	6
	8			S/B	400	8.5
Union Drlg	13	del	1200	Idco BIR5525	425	6

NORTH DAKOTA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
KCA Drlg	C3	del	1200	Nat 80B	1200	12
Noble Drlg	OW-861	del	2400	Oiwl 860	2400	18
Pruet-Ram-Co	1	d-e	2000	Emsco D3	2000	18
	2	del	3000	Emsco C1	3000	20
	3	del	1800	Emsco D2	1200	15
	5	del	1800	Emsco D2	1200	14
Ratliff Drlg	6	del	1650	Emsco GB800	1650	17
	15	del	1650	Nat 80B	1650	18
Westburne Drlg	63	del	1000	OIME SL7	1400	15
	70	del	900	Nat 50A	700	10
BILLINGS						
Cardinal Drlg	1	del	864	BDW 800	1140	14
Drilcon	2	del	1176	Nat 80B	1176	14.5
Enopco	4	del	1800	Nat 610	2100	14
	7	del	2000	Nat 80B	1800	18
Spartan Drlg	25E	d-e	700	Idco 725E	1000	10
BOTTINEAU						
Cardinal Drlg	8	del	400	Nat T20	440	5.5
	34	del	400	Emsco GB160	400	4.5
BOWMAN						
Grace Bomac Drlg	41	del	700	S/B N7	700	10
Noble Drlg	E551	del	800	Emsco A550	800	13
	N-57	del	800	Nat 55	800	12
BURKE						
Cardinal Drlg	5	del	541	Emsco GB250	500	7.5
	14	del	580	Emsco GB350	840	8.5
	35	del	1120	SOS 6000S	480	7.5
Kenting Drlg	44	del	550	Emsco GB350	550	8.5
DIVIDE						
Cardinal Drlg	7	del	1120	Emsco GB500	864	10.5
Dual Drlg	27	del	1200	Emsco D3	1000	16
Kenting Drlg	3	del	615	Emsco 500	800	11
Noble Drlg	E552	del	800	Emsco A550	800	13
Westburne Drlg	61	del	1050	Nat 55	1320	12.5

NORTH DAKOTA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
DUNN						
Anderson-Myers Drlg	18	del	2300	Nat 55	1200	13
Atco Drlg	10	d-e	2000	Nat 80UE	2000	16
Grace Bomac Drlg	52	del	1500	Nat 80B	1500	16
	58	del	1500	Nat 80B	1500	16
GOLDEN VALLEY						
Dual Drlg	3	del	1500	Wils 120	1650	15
Grace Bomac Drlg	40	del	1000	Olwl 76	1000	13
Kenting Drlg	6	del	1500	S/B N85	1500	15
MC KENZIE						
Blocker Drlg Canada	2	del	1000	OIME 1000SL	1500	16
	4	del	770	OIME 750SL	1155	14
	11	del	1000	Nat 80B	1500	15
	2[illegible]					9
Brinkerhoff-Signal	1	del	1100	G-D 800	1100	13
	65	del	1000	Nat 60B	1000	16
	80	del	1500	Nat 80B	1500	16
Dixilyn-Field Drlg	35	d-e	1600	Nat 80UE	2000	15
Drilcon	4	del	1800	Nat 110	1800	15
Dual Drlg	17	del	1550	Beth M58	750	12.5
Forwest	4	d-s	2000	Idco 1200	1600	16
	5	d-s	2000	Nat 80UE	2000	16
Grace Bomac Drlg	30	del	1500	Olwl 96	1500	18
	33	del	1500	Olwl 96	1500	14
	36	del	1500	Nat 80	1500	15
	38	del	1000	G-D 700M	1000	12.5
	42	del	1000	G-D 700M	1000	12.5
	47	del	1500	Nat 80B	1500	16
	48	del	1500	G-D 800M	1500	16
	49	del	1500	G-D 800M	1500	16
	50	del	1500	Nat 80B	1500	16
	51	del	2250	Nat 110M	2250	20
	57	del	1500	G-D 800M	1500	16
	60	del	1500	Nat 80B	1500	16
Kenting Drlg	1	del	1500	Nat 80B	1500	15
	11	del	1200	MC U40	1200	14
	43	del	800	Emsco GA500	800	10.5
	47	del	800	MC 36A	800	11
	48	del	1400	Nat 610	1400	12.5
Noble Drlg	N-811	del	1606	Nat 80B	1606	15
Penrod Drlg	105	del	1575	Nat 80B	1760	15
Shelby Drlg	54-E	d-e	1000	Nat 370ESCR	650	10
Spartan Drlg	8UE	d-e	1000	Sup 1000E	1000	16
True Drlg	23	del	1800	MC U712A	1800	16
Westburne Drlg	62	del	1050	Nat 50A	1050	11
MERCER						
Penrod Drlg	103	del	1760	Nat 80B	2000	20
MOUNTRAIL						
Brinkerhoff-Signal	77	del	1500	G-D 800M	1500	13.5
RENVILLE						
Cardinal Drlg	3	del	400	Nat T20	400	5.5
	6	del	560	Emsco GB250	440	6.5
	12	del	560	SOS 6000	480	6.5
Grace Bomac Drlg	21	del	520	Idco H35SC	280	7
SHERIDAN						
Kenting Drlg	2	del	1200	MC U40	1200	14
SLOPE						
Grace Bomac Drlg	92	del	1000	G-D 700M	1000	12.5
True Drlg	21	del	1800	Nat 80B	1800	15
STARK						
Brinkerhoff-Signal	11	del	1500	Nat 80B	1500	15
Challenger Drlg	22	del	1400	Nat 110	1800	18
WARD						
Grace Bomac Drlg	27	del	1010	S/B N55	750	9.5
WILLIAMS						
Blocker Drlg Canada	1	del	1000	OIME 1500SL	1500	13
	8	del	770	OIME 750SL	1155	14
Burris Drlg	102	del	1000	G-D 700	1000	14.5
Cliffs Drlg	36	del	1700	Emsco JB1250	1650	16
Drilcon	3	del	784	Nat 50A	784	10
Grace Bomac Drlg	25	del	1500	Nat 80B	1500	15
	35	del	2250	Nat 110M	2250	20
Kenting Drlg	14	del	1500	Nat 80B	1500	15
	30-E	d-e	2000	Nat 80UE	1000	15
Nicor Drlg	16	del	1550	Olwl 76	1000	15
	27	del	2000	S/B N95	1500	18
	40	d-e	1700	Olwl 860E	700	12
Noble Drlg	N-82	del	1200	Nat 80	1200	15
Shelby Drlg	52	del	1500	OIME SL7	1500	18
TMBR Drlg	21	del	1100	Nat 75CA	1100	13
	28	del	1650	G-D 800	1650	18

OHIO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ASHTABULA						
P E P Drlg	2	del	500	Idco H35S	350	6.5
	3	del	650	Nat T45	600	7.5
Underwater Gas Dev	2			I-R T5	400	5
CARROLL						
Armstrong Drlg	30	Air		Wils 42	700	
	51	Air		Wils 42	400	
COSHOCTON						
Mid Atlantic Oil	3	del	500	Wils 42	500	8.5
GEAUGA						
P E P Drlg	1	del	550	S/B N45	450	7.5
	4	del	550	G-D 500	500	7
	6	del	550	Idco H35S	350	6.5
LAKE						
Armstrong Drlg	24	Air		Wils 42	400	
International Petr Serv	12	del	475	Chal Model 320	380	4
MEDINA						
Armstrong Drlg	12	del	380	May 3000	318	4
Miller Contract Drlg	21	del	425	S-H 6000	425	7
MEIGS						
Smith Petr, Carl E	7	del	320	Idco BIR5525	475	8.5
PORTAGE						
Mid Atlantic Oil	4	del		Idco Rmbr	325	5.6/3.5"
STARK						
Armstrong Drlg	31	Air		Wils 42	400	
SUMMIT						
Armstrong Drlg	10	del	380	May 3000 Port	350	4
	29	Air		Wils 42	400	
TRUMBULL						
Armstrong Drlg	11	del	380	Wils Mogul 42	380	7.5
	27	del		Wils Mogul 42	280	7.5
WASHINGTON						
Mid Atlantic Oil	1	del	400	Idco Rmbr 5525	480	7
	2	del	500	Idco Rmbr 5525	480	7

OKLAHOMA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Arden Drlg	1	d-e	1600	Emsco D2	1200	16
	2	del	800	Emsco W[illegible]	800	12
	5	d-e	2400	Emsco [illegible]	2400	18
	8	del	3400	Emsco CE3000	3000	30
Ardmore Drlg	1	del	450	Idco H30-D	450	5
	2	gas	700	Wils Giant	700	9
	3	gas	1350	Idco M10000	1350	12.5
	4	gas	600	Wils	400	5
	5			Idco		16.5
Astro Drlg	15	del	912	Wils Super Giant	912	10.5
	18	del	556	Idco H1000	940	12
	21	del	2500	Nat 100	1500	18
	28	d-e-s	2000	I-R 2550	1500	16
ACT Drlg	1	del	1750	G-D 6D 800	1000	16
	2	del	1750	Nat 125	1950	23
	3	del	600	Wils 42	700	10
C E C Drlg	1	del	1100	MC U15	800	10
Continental Drlg	1	d-e	3200	Idco E2100	2000	25
	4	d-e	3200	Idco E2100	2000	25
	7	d-e	3200	Idco E3000	3000	30
	8	d-e	2600	Idco E1700	1700	19
	9	d-e	2000	Idco ED1200	1200	16
	10	d-e	3200	Idco E2100	2000	25
	12	d-e	2000	Idco ED1200	1200	16
	13	d-e	2000	Idco ED1200	1200	16
	15	d-e	2000	Idco ED1200	1200	16
	16	d-e	2000	Idco ED1200	1200	16
	32	d-e	2600	Idco E1700	1700	19
	34	d-e	3200	Idco E2100	2100	25
	35	d-e	2600	Idco E1700	1700	19
Cothrum Drlg	15					
	18					
	19					

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED (Cont'd)						
Culver Drlg	2	del	700	Nat 50A	700	12
	5	del	800	G-D 800	800	16
	7	d-e	2000	G-D 1500	2000	25/5"
	8	del	1200	OIME SL7A	1200	18/5"
	9	del	1800	Nat 110	1800	18/5"
	22	del	800	Coop 750	800	9.5/4"
Fossil Drlg	1	del	1150	Emsco GB350	800	10
	2	del	1350	G-D 500M	900	12
	4	del	1300	MC U15	900	12.5
Noble Drlg	GD2	del	3135	G-D 2100	3135	25
	OW-23	e-s	3750	Olwl E2000	2000	25
	OW-842	e-s	2000	Olwl 840	2775	20
Ratliff Drlg	14	del	2640	MC U1220B	2640	28
	20	del	3800	U1220EB	2500	30
Sandia Drlg	1	del	3000	G-D E800	3000	18
	2	del	4000	Emsco C1	4000	22
	3	del	3000	Emsco D3	3000	18
	4	del	4000	Emsco C1	4000	22
	5	del	2000	Emsco D2	2000	16
Scott Drlg, Jerry	4	del	800	Beth C50	640	10
TWT Expl	54	del				10
Unit Drlg & Expl	5	del	850	MC U15	800	12
	26	gas	800	Nat 75	800	15
	27	del	1800	G-D 1500	2400	25
	30	del	2350	Beth 1350M	1800	20
Vaughn Good Drlg	3	del	500	Coop 800	500	9
Westburne Drlg	64	del	1500	MC U814C	1680	18
	67	del	1800	Olwl 96	1725	18
	68	del	1875	MC U1220	1875	20
	71	del	1450	Olwl 860	1500	18
ATOKA						
Basin Drlg	15	del	1000	MC U712AM	1200	17
FWA Drlg	10	del	1150	Wils Giant	720	11.5
Lagerson Drlg	4	d-e	2000	Emsco J1100E	2500	22
BEAVER						
Beredco	1	del	800	MC U15	800	9
Eagle Drlg	2	del	1000	Nat T45	725	9.5
ONEOK Drlg	2	d-e	1410	MC 38A	1000	13
Rine Drlg	4	gas	750	S/B N75	750	12
Slawson Drlg	5	del	380	Idco H525	480	7.5
Triad Drlg	1	del		Nat T32	475	8
Unit Drlg & Expl	4	del	500	MC U15	800	11
Westwood Drlg Co	17	del	600	G-D 500	650	9
Zenith Drlg	8	del	400	Emsco 350	400	9
BECKHAM						
Arden Drlg	3	del	2500	Emsco C1	1500	20
	9	d-e	2000	Emsco D2	1800	14
Atco Drlg Southern	14	d-e	3200	Nat 1320E	2000	22
Big Chief Drlg	37	gas	1350	Emsco J1250	1350	18
	45	del	1500	S/B N85A	2250	18
Challenger Drlg	7-E	del	900	Nat 80E	1000	14
Grace TRG Drlg	10	d-e	3000	G-D 3000E	3000	30
	11	d-e	2000	G-D 1100E	2400	18
	18	d-e	2200	G-D 1500E	2400	22
	141	d-e	2200	G-D 1500E	2400	2[illegible]
Helmerich & Payne	49	del	1650	Nat 110	1815	18
	76	del	1650	Olwl 760	1815	16.5
Loffland Bros	32	d-e	4000	Emsco CE3000	3000	35
	34	d-e	3600	MC U1220	2500	28
	102	d-e	3300	MC U1220EBD	3300	28
	317	del	2250	G-D 1500	2500	24
Moran Bros	34	del	1700	Olwl 760	1000	15
Nicor Drlg	49	d-e	3200	G-D 1500E	2000	25
	60	d-e	3200	MC U1220EB	2500	30
Nowotny & Conley Drlg	6	del	3200	Nat 1320UE	2000	12.5
Parker Drlg	54	gas	1800	Nat 130	1800	25
	59	gas	1650	OIME 1500C	1650	20
	167	del	1650	OIME SL1500	1650	20
	182	del	3000	OIME Hercules 3000E	3000	30
	201	del	4800	OIME E4000	4000	50
	212	del	3200	OIME 2000	2000	25
Penrod Drlg	8	del	2800	Nat 1320M	3425	25
	116	del	1300	Nat 1320M	2000	25
	117	del	1300	Nat 1625M	2000	25
	129	del	1000	Nat 80B	1760	15
	130	del	1000	Nat 80B	1760	15
Quarles Drlg	8	del	2000	OIME SD 7E	1000	22
Rowan Drlg-US	18	del	3200	Emsco A[illegible]500	2500	30
Sharp Drlg	39	del	2331	Olwl M2000	2742	30
	40	del	1770	Olwl 96	2025	18
	56	del	2319	Olwl 96	2807	23
Tri-Land Drlg	1	del	1500	G-D 1500E	2000	21
Trigg Drlg	8	del	1200	Nat 125	1600	20
	9	d-e	2700	Beth 1360MX		22

OKLAHOMA (Cont'd)

BECKHAM (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
U R C Drlg	4	d-e	1500	MC 814C	1500	22
	5	del	2230	MC 1220	2250	25
Unit Drlg & Expl	28	d-e	1800	G-D 1500E	2000	25
Westwood Drlg Co	Gary Jack	d-e	2000	G-D	2000	18
	22	del	2000	Emsco E900	2000	15
Wilson Bros Drlg	17	del	2800	Nat 110	2700	20

BLAINE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Atco Drlg Southern	16	d-e	3000	Nat 110UE	1000	18
Exeter Drlg	47	del	800	MC U36	680	10.5
	50	del	900	S/B N75	900	14
	55	del	900	Beth 800	800	15
Grace TRG Drlg	1	del	1245	Nat 75	1305	14.5
	2	del	825	G-D 500M	870	11.5
GraceTRG Drlg	142	del	1000	Beth 850	1000	12
Rine Drlg	7	del	750	G-D 700	750	13.5
Santa Fe Drlg	SFM 2	del	1400	Idco ED900	900	14
	SFM 4	del	1500	OIME SL1500	1500	18
Triad Drlg	7	del		G-D 800	1100	16
Unit Drlg & Expl	10	del	1000	Beth MS8	1300	16.5
Westwood Drlg Co	21	del	1500	BDW 650M	1300	14

CADDO

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Basin Drlg	16	del	1300	MC U814CM	1400	22
Big Chief Drlg	46	d-e	3000	Emsco Electrohoist III	4250	25
	47	d-e	4000	G-D 3000E	3000	35
	48	d-e	4000	G-D 3000E	3000	35
Bonray Drlg	1	del	1230	Oilwl 700	1230	16
	20	del	1680	Idco Super 711	1680	17
Brinkerhoff-Signal	15	del	2000	G-D 1500	2000	20
Dual Drlg	4	del	2000	Nat 110	1500	19
	15	del	2700	Wils 150A	1850	19
Eason Oil	22	d-e	2800	Emsco C1E	1500	21
	25	d-e	2800	Emsco C1E	1500	21
Enepco	1	del	2800	Nat 110M	2700	27
	6	del	2800	Nat 110M	2700	20
Grace TRG Drlg	133	d-e	2000	G-D 1100E	2400	18
	134	d-e	2200	G-D 1500E	2400	22
	135	d-e	2200	G-D 1500E	2400	22
	136	d-e	2200	G-D 1500E	2400	22
	137	d-e	2200	G-D 1500E	2400	22
Helmerich & Payne	48	del	1640	Nat 110	1820	22
	92	d-e	2000	Nat 110ME	1500	20
	112					
	113					
Lagerson Drlg	8	d-e	2000	Emsco C3E	2500	22
Loffland Bros	186	d-e	3300	MC U1220	2200	28
Moran Drlg, E W	2	del	1800	G-D 700	800	14
	22	d-e	3200	Emsco C3	3000	30
	25	d-e	3200	G-D 3000E	3000	25
	27	d-e	3200	G-D 1500E	2800	25
Nicor Drlg	6	del	1900	Nat 55	700	13.5
	10	del	2000	MC U814C	1500	18
	12	del	1170	G-D 700M	700	13
	30	del	2000	MC U814C	1500	18
	33	d-e	2000	MC U814EC	1500	21
	35	d-e	2000	MC U814EC	1500	21
	42	d-e	2000	MC U814EC	1500	21
	47	del	2800	Emsco C3E	2800	25
ONEOK Drlg	11	d-e	2800	Nat 110UE	2000	20
Parker Drlg	149	gas	1060	Nat 75	1000	16
	213	del	2200	OIME SL1500	2200	22
Quarles Drlg	9	del	2800	OIME SD 7E	1860	22
Resource Drlg	RD9	del	2330	Nat 110	2740	18
Santa Fe Drlg	SFM 1	del	820	Nat 50A	450	11
	SFM 8	del	2700	OIME SD7E	960	20
Top Drlg	7	d-e	2060	Oilwl 700E	1060	20
Unit Drlg & Expl	8	del	1080	Nat 55	1588	15
Viersen & Cochran Drlg	2	del	1250	Nat 55	880	12.5
	6	del	2300	Beth 1013	2400	20
Westwood Drlg Co	20	del	1800	S/B N95	380	20

CANADIAN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Beard Drlg (OK)	1	gas	675	Emsco G450	450	10
Bonray Drlg	4	del	900	MC U40	900	12
Drillers	36	del	600	Emsco GB300	700	8.5
	40	d-e	2100	G-D 1100E	2100	22
Exeter Drlg	51	del	600	MC U36	600	10.5
	52	del	600	MC U36	600	10.5
	53	del	600	Emsco GC450	600	10.5
	54	del	1000	Beth 1330	1100	18
	58	del	800	Nat55	1000	12
	60	del	600	Nat 50	600	9
	61	del	1000	Nat 800	1100	17
FWA Drlg	34	del	2300	Oilwl 760	1560	15
Grace Sabre Drlg	8	del	1365	MC U15	1060	9
Leeman Drlg	2					
Loffland Bros	111	d-e	2300	Emsco A1500	2200	24

OKLAHOMA (Cont'd)

CANADIAN (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Moran Bros	35	el	1700	Oilwl 76	1600	15
Ratliff Drlg	11	del	850	S/B N7	860	10
Santa Fe Drlg	SFM 5	del	1200	OIME SD6	750	12
	SFM 7	del	1200	OIME SD6	750	12
U R C Drlg	2	del	1100	Nat 100	1100	15
	3	del	860	MC U36A	860	12.5
	6	del	1600	Idco BR7585		10.5

CARTER

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Big Chief Drlg	12	gas	1600	Nat 800	1600	14
Bodard & Hale Drlg	8	del	600	MC U36A	1100	13.5
	9	del	500	Beth S55	700	9
Butler-Johnson	12	del	1300	G-D M750	1300	12.5
Grace TRG Drlg	130	d-e	2280	G-D 1100E	2400	16
Jones Drlg Corp	18	del	600		600	8
Loffland Bros	73	d-e	2180	MC U712A	2250	18
Magic Circle Drlg	12	del	900	Nat 50A	900	12
Noble Drlg	N-133	e-e	3300	Nat 1320UE	1320	25
Parker Drlg	186	del	2200	OIME 1500C	2200	22
Ratliff Drlg	7	g-b	1000	Nat 75CB	1000	15

CIMARRON

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
N R G Drlg	1	del	580	Wils Mogul 42	500	7
Service Drlg	10	del	380	MC	400	5

CLEVELAND

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Basin Drlg	9	del	600	G-D 500M	820	10
Bates Drlg, B	4	del	400	MC U34	375	6.5
Beard Drlg (OK)	3	del	1379	MC U10	1029	14
Bodard & Hale Drlg	7	del	550	Beth S55	600	8
Nicor Drlg	8	del	755	Nat 50CA	425	11
ONEOK Drlg	3	del	550	Wils Giant	250	7
Santa Fe Drlg	SFDLI-20	d-e	3400	Oilwl E2000	2850	25
	SFM 12	del	2050	G-D 800	1000	15
	SFW-7	d-e	2800	Emsco C3111	3000	30
Top Drlg	1	del	850	S/B N7	900	10
	2	del	1200	Oilwl 660	1230	14
	5	del	1000	MC U15	1050	10
	6	del	350	Nat T32	350	7.5
Unit Drlg & Expl	22	gas	465	Nat 50	600	10

COAL

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Arden Drlg	4	del	1800	Emsco D2	1000	16
Moran Drlg, E W	29	del	1450	G-D 700	800	13
Roberson Drlg	1	gas	600	Emsco	400	7
	3	gas	700	MC U15	600	10

COMANCHE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Bonray Drlg	9	d-e	3000	Oilwl E2000	2000	25
Drillers	46	d-e	3800	Idco E3000	3000	30
Jones Drlg Corp	2	del	385		385	5
JFP Well Serv	8	del	2080	Oilwl E2000	2000	25
Loffland Bros	200	d-e	3300	Emsco 3000 Type II	3300	30
Nicor Drlg	20	d-e	2700	G-D E1500	2000	25
Parker Drlg	205	del	2200	OIME 1500C	2200	22
Penrod Drlg	3	del	2880	Nat 1320M	3425	25
	21	del	2800	Nat 1320M	1950	15
	26	del	2800	Emsco C2	1950	25
	118	del	1600	Nat 1625M	3000	30
	123					
	127	del	1000	Nat 80B	1700	15
Resource Drlg	32	del	1040	Nat 610	1220	12
Rowan Drlg-US	9	d-e	2800	Nat 1625DE	2800	25
Westwood Drlg Co	23	d-e	3200	Emsco C2	2000	26

CREEK

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
McLennan Drlg	4	del	318	G-D	238	2

CUSTER

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Bonray Drlg	21	del	960	Idco H750	660	12
Drillers	42	d-e	3000	Emsco Electrohoist II	3000	25
Dual Drlg	20	del	2250	Oilwl 860	1400	22
	32	d-e	2800	Oilwl 840	1500	22
Eason Oil	12	del	2000	Nat 80B	1200	15
Exeter Drlg	44	del	1000	G-D 800M	1100	15
Grace TRG Drlg	16	d-e	1600	G-D 800	1800	16
Helmerich & Payne	85	d-e	1700	Oilwl 760E	780	16
	94	d-e	2800	Nat 110ME	1500	20
Lanex Drlg	B-30	d-e	2880	Emsco EHII	2800	20
Loffland Bros	218	d-e	3380	MC U1220E	2200	28
	244	d-e	2500	MC U1220E	2200	28
Magic Circle Drlg	17	del	2480	Oilwl 96	2480	20
Moran Drlg, E W	4	del	1450	Wils 120	1100	[illegible]
	5	del	1850	Wils 120	1100	[illegible]
	11	del	2800	Wils 150A	1800	20

OKLAHOMA (Cont'd)

CUSTER (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Oklahoma Warrior Drlg	2	del	1800	S/B 75	1200	15
ONEOK Drlg	7	d-e	1485	G-D 800E	1000	17
	12	d-e	2000	Oilwl 840E	2000	20
Parker Drlg	170	del	1600	OIME SL1500P	1600	20
	210	del	2200	OIME 1500C	2200	22
Quarles Drlg	12	del	2700	MC U814C	2400	22
Santa Fe Drlg	SFDLB-21	d-e	2800	Nat 110UE	1500	17
	SFM 14	del	1450	BDW 800M	800	15
	SFM 6	del	1250	OIME SL7	900	16
	SFW-17	d-e	1300	Nat 100	2000	14
Triad Drlg	10	del		G-D 700	1100	15
Unit Drlg & Expl	20	del	1000	G-D 700	1300	16
Viersen & Cochran Drlg	1	del	1400	Oilwl 660	800	12
	15	del	1300	Oilwl 660	850	14.5
Westwood Drlg Co	1	del	1750	S/B N75	1500	12
Wilson Bros Drlg	16	del	2800	Nat 1320	2700	30

DEWEY

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Basin Drlg	6	del	750	Emsco D8M	820	13
Beard Drlg (OK)	2	gas	1200	MC U15	800	12
Brinkerhoff-Signal	66	del	700	Nat 55	700	12.5
Exeter Drlg	59	del	600	Nat 50	600	10.5
FWA Drlg	3	del	1400	Wils Giant	800	11.5
Helmerich & Payne	91	del	1600	Nat 80B	800	15
Hickman Drlg	2	del	1800	BDW 800	1000	12
Lanex Drlg	B-16	d-e	2000	G-D 800E	1000	16
Mercury Drlg	11	del	1500	Emsco U15	960	9
Nicor Drlg	7	del	1300	MC U15	700	11.5
Oklahoma Warrior Drlg	5	del	2000	BDW	1200	15
ONEOK Drlg	1	d-m	1150	MC U15	800	13
Rine Drlg	5	del	700	S/B N55	700	9
Triad Drlg	5	del		Idco Super 750	1100	14
	11	del	1300	U-40	820	14
	12	del	1050	U-15	700	12
Trigg Drlg	2	g-b	700	Nat 75	800	12
Unit Drlg & Expl	18	del	1000	G-D 700	1300	18
	24	del	600	G-D 800	1200	15
Viersen & Cochran Drlg	5	del	1250	Oilwl 660	800	12.5
	20	del	1000	Nat 610	1300	12.5
	22	del	1300	Nat 610	860	12.5
Westwood Drlg Co	12	del	866	G-D 700	1000	12

ELLIS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Forex Neptune and/or AIRI	40	d-e	3200	G-D 1100E	1500	18
Gabbert-Jones	3	del	410	Emsco 300	475	8
Grace TRG Drlg	15	del	1245	Nat 75CA	1305	15
Hickman Drlg	5	del	1100	BDW 850	1100	15
Jones Drlg Co, Loyd	80	del	1200	Cbet 750	750	10
Stevens Drlg	8	del	750	Idco H725	750	14.5
Triad Drlg	6	del		S/B N95A	1000	20
	9	del		BDW 650	800	12
Unit Drlg & Expl	9	del	600	S/B N55	1000	12
	11	del	1100	G-D 700	1300	15
Westwood Drlg Co	10	del	680	Oilwl 52T	3000	8

GARFIELD

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Bates Drlg, B	1	gas	300	MC U34	300	5.7
Bodard & Hale Drlg	4	del	400	MC U34	400	6.5
	5	del	400	MC U34	425	6.5
Hughes Drlg	1	del	500	Idco H35	500	7.5
	2	del	550	Idco H35	500	7.5
	16	del	580	S-Star SS40	220	3.5
	17	del	580	S-Star SS40	220	3.5
Nicor Drlg	14	del	1300	G-D 500M	600	10
Thomas Drlg	8	del	300	Idco H35	380	7.5

GARVIN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
Bates Drlg, B	9	del	700	Beth S50	400	7.5
Beard Drlg (OK)	5	del	1379	Emsco D2	1029	15
Big Chief Drlg	42	del	1800	Nat 80	1800	15
	43	del	2000	Nat 800	2250	16
Bodard & Hale Drlg	6	del	600	Nat T20	400	6.5
Bonray Drlg	3	del	980	S/B N7	980	10.5
Cactus Drlg	51	del	700	S/B N55	860	9
	56	del	800	S/B N55	850	9
	57	del	580	Idco H35	450	6.5
Eason Oil	10	del	1800	Emsco D2	750	13
ONEOK Drlg	5	del	1310	MC U15	900	10.5
R W I T Drlg	8	g-l	881	MC U34	280	6
Scott Drlg, Jerry	7	del	350	Crdw L380	650	8
	8	del	1520	MC U15	1000	11
Viersen & Cochran Drlg	4	del	1250	Nat 55	850	12.5

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
GRADY						
Arden Drlg	6	d-e	3200	Emsco C3	3000	35
Cactus Drlg	35	d-e	3220	Nat 110UE	2000	20
Dual Drlg	1	del	1050	Wils 75P	900	12.5
Eason Oil	20	d-e	2800	Emsco D3	1000	16
	21	d-e	2800	Emsco D2	750	13
	23	d-e	3200	Emsco C2E	3000	30
Forex Neptune and/or ARI	50	d-e	3200	G-D 1600E	3000	21.7
Helmerich & Payne	44	del	1650	Nat 110	1615	22
	78	d-e	2800	Nat 110UE	1500	20
	96	d-e	2800	Nat 110ME	1500	20
Hughes Drlg	3	del	1250	Idco 725	725	10.5
Lofland Bros	19	d-e	3200	Emsco C3000	3000	26
	90	gas	1300	MC U30	1300	15
M G F Drlg-Lafayette	46	del	1800	Idco S711	1500	18
Magic Circle Drlg	16	gas	1300	Beth M810	1300	[illegible]
Mercury Drlg	8	del	2000	G-D M700	1400	17
Nicor Drlg	2	del	1300	MC U15	700	12
	31	d-e	2000	MC U914EC	1500	21
Noble Drlg	N-50	del	1050	Nat 80B	1050	15
Oklahoma Warrior Drlg	3	del	1800	Nat 100	1800	17
ONEOK Drlg	8	del	1110	S/B N55	700	10.5
Parker Drlg	172	del	1800	OIME SL1500P	1800	20
	179	del	3000	OIME Hercules 3000E	3000	30
	196	del	3000	OIME E3000	3000	35
Penrod Drlg	135	del	1800	Nat 1625DE	4610	20
Ratliff Drlg	2	gas	1020	Nat 55	1020	14
Resource Drlg	RD-20	del	1060	Nat 80B	1000	14
Santa Fe Drlg	SFM 15	del	1400	BDW 800M	800	15
	SFM 3	del	1250	OIME 1000SL	850	14
	SFM-15	d-e	1600	Emsco C111	2800	30
Thomas Drlg	1	del		S/B N42		11
	6	gas	690	Nat 50A	690	10
Viersen & Cochran Drlg	15	del	2000	Nat 80B	1500	17.5
GRANT						
Bonray Drlg	7	del	375	Coop 550	475	7
Laben Drlg	11	del	500	G-D 3000	500	7
Thomas Drlg	2	del	300	Nat T32	300	7.3
Vaughn Good Drlg	1	del	500	Coop 680	500	9
	2	del	1100	Coop 680	660	12
GRAYSON						
Nicor Drlg	5	del	1250	Beth C50	400	10
HARPER						
Challenger Drlg	3	del	700	Nat 55A	700	10
H30 Drlg	77	del	525	Idco H40	400	8
Sage Drlg	6	del	350	Emsco GA350	500	9
HASKELL						
Alexander Drlg	6	del	800	W-N 250H40	400	7
Grace Miller Drlg	114	del		Nat 50	700	10
Unit Drlg & Expl	2	del	700	MC U15	800	12.5
	29	del	1050	S/B N75	1300	16
HUGHES						
R W I T Drlg	2	g-l	680	MC U34	280	6
Rockwell Drlg	22	del	670	Emsco G38	400	7
	24	del	400	MAC 300	450	5
KAY						
Edco Drlg	5	del	125	Crdw J10*	225	7.5
Kay Drlg	1	del	480	S/B N4	150	6
McLennan Drlg	3	del	400	Cbot 658	318	4.5
KINGFISHER						
American Western	10	del	1000	Cbot 750	700	8
	12	gas	850	Emsco 500	600	10.5
	14	gas	850	Emsco 500	600	10.5
	16	gas	850	Emsco 500	600	10.5
Bodard & Hale Drlg	12	del	450	MAC 400	525	7.5
Bonray Drlg	6	del	700	Nat 50A	700	9
Enspco	5	del	2000	Nat 80B	1000	16
Grace Sabre Drlg	4	del	600	Nat 370	525	7.5
Magic Circle Drlg	16	del	900	MC U15	900	12
Thomas Drlg	5	del	425	Wils Giant	400	8.9
KIOWA						
Exeter Drlg	46	del	900	S/B N75	900	14
Moran Drlg, E W	39	d-e	3200	G-D 3000	3000	30
LATIMER						
C E C Drlg	2	del	1100	MC U15	800	10
Cactus Drlg	29	del	2000	Nat 110	2550	20
Dual Drlg	18	del	1500	Beth M-810	1000	15
Exeter Drlg	46	del	900	S/B N75	900	14
Grace Miller Drlg	19	del	2000	G-D 1500E	2000	22
	117	del		OIME SL7	1500	20
Grace TRG Drlg	18	d-e	2200	G-D 1500E	2400	22
Lanex Drlg	A-15	d-e	2000	Emsco D3	1000	16
	B-12	d-e	1600	Emsco D2	750	13
Moran Drlg, E W	8	del	1900	Wils 150A	1650	18
	14	del	1650	Wils 150	1650	15
	21	del	1450	Wils 120	1100	15
Quarles Drlg	1	del	1500	OIME 750	750	14.5
	3	del	2000	OIME 1000	1000	18
Unit Drlg & Expl	17	del	700	S/B N75	1300	15
LE FLORE						
Alexander Drlg	2	del	1200	Emsco G42	800	12.5
Grace Miller Drlg	118	gas		S-H 7000	390	8
LINCOLN						
Grace Sabre Drlg	6	del	450	Nat T20	335	6
R W I T Drlg	9	g-l	610	Wils	280	6
Sloan Drlg	10	del	400	MC U34	450	6.5
	18	del	370	Crdw 350	450	7
LOGAN						
Basin Drlg	2	del	600	G-D 500M	820	11
	3	del	500	G-D 500M	820	10
	6	del	600	GD 700M	820	12
	10	del	600	G-D 500M	820	10
Bates Drlg, B	2	gas	325	MC U34	245	6.5
Bodard & Hale Drlg	16	del	450	Idco H37	450	6.5
Grace Sabre Drlg	9	del	450	MC U34	450	6
Hughes Drlg	4	del	700	Idco H44	636	9
Oklahoma Warrior Drlg	1	del		Emsco	400	5
Porter Drlg, Gene	1	del	600	MC U34	435	6
LOVE						
Arden Drlg	10	d-e	2000	Emsco D3	1200	16
Basin Drlg	1	del	600	G-D 500M	820	10
Moran Drlg, E W	20	del	1200	S-H 7000	400	9.5
Thomas Drlg	10	del	600	Wils Super Giant	600	11
Viersen & Cochran Drlg	17	del	1200	Olwl 680	850	13.5
McCLAIN						
Drillers	26	del	700	Emsco GB500	700	10
	27	del	700	Emsco GB500	750	10
MAJOR						
Dean Drlg	1	del	1150	Idco H40	900	10
Thomas Drlg	4	del	600	Emsco 500	600	10.2
Top Drlg	3	del	400	Olwl 500	450	8.5
Triad Drlg	3	del		S/B N55	800	12
Unit Drlg & Expl	25	del	600	MC U15	600	10
MARSHALL						
Santa Fe Drlg	SFM-22	d-e	2600	Nat 110UE	1500	17
MC CLAIN						
Arden Drlg	14	del	1300	Nat SS	700	12
Bates Drlg, B	3	del	1100	MC U34	1100	10.5
	15	del	1350	Wils Titan	1575	14
Beard Drlg (OK)	4	del	1379	MC U10	1029	14
Nicor Drlg	64	d-m	1750	Emsco GB800	1000	15
Quarles Drlg	7	del	1050	Nat 750A	800	14
Ratliff Drlg	5	del	1100	Nat 75CS	1100	15
	12	del	700	G-D 500M	700	12
Schlensker Drlg	10	gas	900	G-D 800M	1350	16
Thomas Drlg	9	del	640	S/B N46	640	13
Trigg Drlg	4	del	700	Nat 75	950	12
	5	g-b	500	Nat 50A	800	10
MURRAY						
Bodard & Hale Drlg	11	del	450	MAC 300	450	6.5
NOBLE						
Grace Sabre Drlg	118	del	450	U 34B	450	6
Hughes Drlg	6	del	550	Idco H35	380	6.2
	9	del	550	Cbot 500	343	6.5
OKFUSKEE						
Hughes Drlg	15	del	550	Cbot 550	425	7.5
Scott Drlg, Jerry	1	del	350	S/B N4	350	5.5
	5	del	375	Beth S45	375	6
OKLAHOMA						
Basin Drlg	17	del	1350	MC U914CM	1400	22
Bates Drlg, B	5	del	1000	MC U15	1100	10
Big Chief Drlg	20	gas	1200	MC U40	960	13.5
	30	gas	1515	Idco 1050	1515	15
Bigard Drlg	18	d-e	2000	Idco ED1200	2000	20
Bonray Drlg	8	del	850	Coop 750	850	10
Eason Oil	17	del	2300	Emsco C1	1500	21
	18	d-e	2300	Emsco C1E	1500	21
	24	d-e	2600	Emsco C1E	1500	21
Grace Sabre Drlg	7	del	1050	MC U15	450	7.5
Mercury Drlg	3	del	2000	Olwl 96	2100	22
	5	del	2700	G-D 1100	3225	22
	6	del	1500	Emsco 500	1425	14
	12	del	2000	G-D 800	2100	20
	14	del	2000	MC U914	2100	22
	15	del	2700	Nat T1320M	3225	25
Nicor Drlg	65	d-e	2700	MC U914EC	1500	21
	71	d-e	2000	MC U914EC	1500	21
Parker Drlg	43	gas	1800	Olwl 96	1800	20
	47	gas	1400	OIME 1500C	1400	20
	71	gas	1600	Nat 125	1600	20
	114	d-e	2700	Idco 3000E	3000	30
	142	del	2600	Nat 1320E	3000	25
	164	del	1650	OIME SL1500P	1650	20
	181	del	3000	OIME Hercules 3000E	3000	30
	192	gas	1200	OIME 1000C	1200	16
	204	del	2200	OIME E1500C	2200	22
	206	gas	2200	Idco 711	2200	18
Ratliff Drlg	10	gas	1020	Nat 50	1020	10
	16	del	750	MC U15	750	10
	17	del	700	Nat 50A	700	12
S & T Drlg	8					
	11					
Schlensker Drlg	11	del	2400	G-D 1100M	2400	20
Scott Drlg, Jerry	6	del	1342	MC U15	1342	10.5
Venture Drlg	2	del	550	Cbot 750	750	7.5
Viersen & Cochran Drlg	3	del	1250	Nat 75	850	12.5
	10	del	2000	Nat 100	1000	15
	12	gas	900	Nat 50	800	9
	23					
Warren Interstate Drlg	1	del	1000	Cbot 2042TDHT	700	10.7
OKLAHOMA CITY						
Blocker Drlg	26					14
OKMULGEE						
Equity Drlg	175	del	300	Wils Super 38	300	4.2
OSAGE						
McLennan Drlg	5	del	450	Cbot 658	318	4
PAYNE						
Grace Sabre Drlg	153	del	450	MC U34	450	6
Hughes Drlg	5	del	550	Idco H35	380	6.2
	10	del	550	Cbot 550	425	7.5
PITTSBURG						
Arden Drlg	13	del	1800	Idco H7-11	700	12
	15	del	2000	OIME SL7	1000	16
Basin Drlg	13	del	1470	G-D 730M	1220	14
Dual Drlg	2	del	1250	Wils Giant	650	9.5
	10	del	1250	Wils 120	1100	15
FWA Drlg	7	del	1500	Wils Titan	1040	14
Grace Miller Drlg	122	del		BDW 800	1330	15
	123	del		BDW 800	1300	15
Unit Drlg & Expl	16	del	600	MC U15	800	11

OKLAHOMA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
PONTOTOC						
Royal Drlg	1	dsl	300	Emsco GB160	675	4.2
Scott Drlg, Jerry	10	dsl	400	Crdw 450	450	6
POTTAWATOMIE						
Bodard & Hale Drlg	14	dsl	450	S/B N4	450	6.5
	15	dsl	450	MAC 400	525	7.5
Exeter Drlg	63	dsl	450	Coop 750	600	8
Falcon Drlg	1	dsl	600	Beth S45A	400	7
Sloan Drlg	12	dsl	370	S/B N4	450	6.5
PUSHMATAHA						
Dual Drlg	36	d-e	2000	Olwl 760	1000	16
Loffland Bros	206	g-e	2160	MC U914[illegible]	2200	20
ROGER MILLS						
Baker & Taylor Drlg	5	dsl	1400	MC U20	1400	22
Basin Drlg	4	dsl	1600	G-D 700M	320	14
Challenger Drlg	32	dsl	2400	Nat 1320	2400	20
Exeter Drlg	62	dsl	1000	Nat 110M	1100	17
FWA Drlg	19	dsl	1600	Wils Titan	1040	14
Grace TRG Drlg	17	d-e	2200	G-D 1500E	2400	22
	132	d-e	3000	G-D 3000E	3000	30
Helmerich & Payne	55	dsl	1100	Nat 55	1210	14
	82	d-s	2800	Olwl E2000	2000	26
	96	d-s	1600	Nat 80UE	800	15
	97	d-e	3400	Olwl E2000	2000	26
Loffland Bros	18	d-e	2600	MC U1220EB	2200	28
	123	gas	1975	Nat 130	2200	26
	311	dsl	2250	G-D 1500	2500	24
Nicor Drlg	19	dsl	1650	Idco 750	750	15
Noble Drlg	OW-841	e-s	2775	Olwl 840E	1400	20
ONEOK Drlg	9	dsl	1110	MC U15	700	13
Parker Drlg	203	dsl	2600	OIME E2000	2000	25
Rowan Drlg-US	14	dsl	3200	Nat 1625M	3000	35
	31	dsl	3200	Nat 1625	3300	30
Santa Fe Drlg	SFM 11	dsl	1900	G-D 800	1000	15
	SFM 9	dsl	1600	BDW 800MX	800	16
Slawson Drlg	9	dsl	1400	Idco H900	950	16.5
Tri-Service Drlg	9	dsl	2475	Nat 1320M	2475	22
	10	dsl	1800	Olwl 860	1800	21
	12	d-s	3300	Olwl E2000	2000	25
Unit Drlg & Expl	15	dsl	1300	MCSCO 914C	1850	25
Viersen & Cochran Drlg	21	dsl	2000	Nat 80B	1600	17.5
Wilson Bros Drlg	1	d-e	2600	Idco E2100	2100	21
SEMINOLE						
Bates Drlg, B	7	dsl	1000	Wils Titan	1050	12
	14	dsl	700	MC U15	450	7.5
Rockwell Drlg	18	dsl	670	MC U34	450	5
	20	dsl	670	MAC 350	550	6.5
Scott Drlg, Jerry	2	dsl	420	MC U34	430	6.5
Sloan Drlg	14	dsl	370	Nat T20	600	7
	16	dsl	370	Wils 42	600	7
	20	d-e	850	Wils 90EH	1000	12
SEQUOYAH						
Alexander Drlg	5	dsl	1800	Emsco A1100	1400	18
STEPHENS						
Arden Drlg	7	dsl	1700	OIME SL7	1500	15
Bates Drlg, B	8	dsl	1000	Wils Giant	1050	12
Big Chief Drlg	36	dsl	1400	Nat 55	900	11
Challenger Drlg	23	dsl	1800	G-D 11100	2700	18
	26	dsl	30	Nat T20	600	5
Compadre Drlg & Expl	1	dsl	360	W-N A25040	360	6
Grace TRG Drlg	5	dsl	1245	Nat 75	1305	14.5
Helmerich & Payne	8	dsl	1100	Nat 55	1210	14
Jones Drlg Corp	7	gas	700		750	12
	8	gas	700		700	12
	15	dsl	900		1000	14
Lanex Drlg	B-15	d-s	2000	Emsco D3	1000	16
Moran Drlg, E W	10	d-e	2600	G-D 1500	2000	25
Nicor Drlg	18	dsl	1300	MC U15	700	12.5
	83	dsl	3200	MC U1220EB	2500	30
Ratliff Drlg	8	g-b	1020	Nat 50A	1020	10
	9	gas	700	Nat 50A	1020	11
Thomas Drlg	11	dsl	300	Wich R-6	300	6
U R C Drlg	1	dsl	860	Nat 50	860	10
TEXAS						
Bohannan Drlg	2	dsl	750	Idco H35SC	650	8.5
Damac Drlg	6	dsl	550	Cbot	450	6.5
Gabbert-Jones	12	dsl	450	S/B N42	525	8
H30 Drlg	8	dsl	600	Idco H40	600	10
Sage Drlg	2	dsl	350	Olwl T52	500	6.5
	5	dsl	350	Unit U15	500	7
	7	dsl	350	BDW 450	500	9
Service Drlg	2	dsl	450	MC U34	450	6
WASHINGTON						
Equity Drlg	150	dsl	300	Fail 2500	300	3/ 3.5"
WASHITA						
Arden Drlg	12	d-e	2600	Nat 110UE	1500	22
Bonray Drlg	2	dsl	1650	Olwl 860	1650	20
	30	dsl	2400	Nat 1320	2400	25
	31	dsl	2400	Nat 1320	2400	25
	32	dsl	1600	Nat 110	1600	20
Challenger Drlg	6-E	dsl	900	Nat 80E	1000	14
Drillers	44	d-e	2000	G-D 2000	2000	25
Haning & Young Drlg	151	d-e	2000	S/B NE95	1700	18
Helmerich & Payne	99	d-s	3400	Olwl E2000	2000	26
Lagersen Drlg	7	d-e	2000	Emsco CIE	2500	22
Lanex Drlg	A-12	d-s	1600	Emsco D2	750	13
Loffland Bros	20	d-e	3200	Emsco C3000	3000	35
	227	dsl	2400	MC U914A	2500	22
	324	dsl	2250	G-D 1500	2500	24
	327	dsl	2250	G-D 1500	2500	24
Magic Circle Drlg	18	d-e	4000	Emsco C2	2000	25
Mercury Drlg	7	dsl	2000	G-D 800M	2100	18
	10	dsl	2000	G-D 800	2100	18
Moran Drlg, E W	9	dsl	2000	Wils 150	1650	18
	28	d-e	3200	G-D 3000E	3000	40
Nicor Drlg	55	d-e	2000	MC U914EC	1500	21
Noble Drlg	N-115	dsl	2130	Nat 110	2130	20
	N-117	e-s	3645	Nat 110UE	3645	20
Oklahoma Warrior Drlg	4	dsl	1800	DBW	1000	17
Parker Drlg	178	dsl	2200	OIME SL1500P	2200	22
	214	gas	2200	OIME 1500C	2200	22
Ratliff Drlg	1	dsl	2640	Olwl 96	2640	24
Resource Drlg	RD-27	dsl	1560	Nat 80B	1835	14
Rowan Drlg-US	5	dsl	3200	Nat 1625M	3000	35
	7	dsl	3200	Emsco A1500	2500	22
	30	dsl	2600	Emsco A1500	2400	22
Unit Drlg & Expl	21	dsl	1000	G-D 700	1300	16
	25	dsl	600	G-D 700	1300	16
Westwood Drlg Co	18	dsl	2000	G-D 1500E	2000	20
Wilson Bros Drlg	22	d-e	2800	Olwl E2000	2000	25
WOODS						
Gabbert-Jones	6	dsl	450	Nat T32	310	6
Hughes Drlg	7	dsl	550	Idco H37	450	3
Magic Circle Drlg	11	dsl	900	Nat 50A	900	10
	14	dsl	320	Cbot 2042	700	9.5
WOODWARD						
Basin Drlg	7	dsl	850	MC U36A-M	820	8
Bonray Drlg	5	gas	700	Nat 50A	700	9
	22	dsl	800	Idco H525	800	10.5
Damac Drlg	3	dsl	930	Wils Mogul	620	9.5
Drillers	23	dsl	600	MC U15	600	10
Grace TRG Drlg	8	dsl	800	Unit 15	1000	10.5
Hickman Drlg	3	dsl	1000	BDW 650	1000	12
	6	dsl	1100	BDW 800	1100	15
Nicor Drlg	28	dsl	1000	MC U15	700	11.5
ONEOK Drlg	6	dsl	1110	MC U15	700	11
Rine Drlg	3	dsl	750	S/B N55	750	9.5
	6	gas	700	S/B N75	750	12
	9	dsl	1000	G-D 800	1000	13.5
Triad Drlg	2	dsl		S/B N45	550	9
	8	dsl	2250	G-D 1500	2250	24
	16					

OREGON

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Bawden Drlg	21E	scr	1000	Emsco C-1	1500	18
COLUMBIA						
Taylor Drlg	5	dsl	750	MC U34	375	6

PENNSYLVANIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
BEDFORD						
Bigard Drlg	12	d-e	2000	Idco ED1200	2000	20
CAMBRIA						
Delta Drlg	91	dsl	255	Idco H35KD	291	6
CENTRE						
International Petr Serv	10	dsl	600	Wils Mogul 42	475	7.5
CLEARFIELD						
Fairman Drlg	5	dsl	400	Crdw	350	4
	6	dsl	350	Idco H44	550	8
	7	dsl	350	Idco H44	550	8
	9	dsl	400	Idco H44	500	8
CRAWFORD						
International Petr Serv	6	dsl	475	Wils 42	475	7.5
P E P Drlg	5	dsl	550	G-D 500M	500	7
Union Drlg	12	dsl	1200	Cbot 500	425	6.5
ERIE						
Underwater Gas Dev	7			Chal 320	300	6
Union Drlg	10	dsl	1200	Idco BIR5535	425	7.5
	14	dsl	1200	Crdw KB250	425	6.5
INDIANA						
Delta Drlg	67	dsl		S-H 7000	480	9
	71	dsl	1000	S-H 7000	440	9
	72	dsl	250	S-H 7000	440	9
	77	dsl	250	Idco H35KD	291	6
	84	dsl	1800	Emsco D3 Type III	1560	16
	92	dsl	255	Idco H35KD	291	6
Fairman Drlg	8	dsl	350	Idco H44	550	8
	15	dsl	300	Idco	300	5
Union Drlg	4	dsl	1200	S-H 6000	340	7
	8	dsl	1200	Idco BIRH37	425	6.5
JEFFERSON						
Fairman Drlg	11	dsl	400	Idco H44	500	8
	12	dsl	400	Idco	250	5
International Petr Serv	8	dsl	600	Wils Mogul 42	475	7.5
LYCOMING						
Delta Drlg	83	dsl	2600	Emsco C1 Type III	2331	18
MERCER						
P E P Drlg	7	dsl	550	Emsco WS1	470	7.5
VENANGO						
Delta Drlg	78	dsl	250	Idco H35KD	291	6
Devonian Drlg	1	dsl	325	Kremco K600	475	7
	2	dsl	505	Cbot 2042	475	6
P E P Drlg	8	dsl	550	G-D 500	500	10
Union Drlg	7	dsl	1200	Cbot 500	425	6.5
WARREN						
International Petr Serv	5	dsl	475	Wils 42	475	7.5
WESTMORELAND						
Delta Drlg	79	dsl	255	Idco H35KD	291	6
Fairman Drlg	10	dsl	400	Wils Mogul 42	350	5
	14	dsl	400	S/B	350	7.5

SOUTH DAKOTA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
CORSON						
Spartan Drlg	30	dsl	500	Idco H525	500	8.5
HARDING						
Cardinal Drlg	9	dsl	1120	Nat 50CA	720	11.5
	15	dsl	1060	Emsco GA500	760	10
Grace Bomac Drlg	26	dsl	1010	G-D 500M	750	3.5

TENNESSEE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
CAMPBELL						
Miller Contract Drlg	18	dsl		I-R T4	600	3.5
FENTRESS						
Norman Drlg, James R	2	dsl	750	I-R	450	2.5

TEXAS

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Ard Drlg	2	dsl	1986	MC U20	1800	18
	3	dsl	1400	MC U40	1200	15
	4	dsl	900	MC U15	900	12
	8	dsl	1900	Emsco 800GB	1800	16
Baker & Taylor Drlg	2	dsl	1400	MC U20	1400	20
	4	dsl	1140	MC U20	1140	18
	6	dsl	1400	MC U40	1400	20
	7	dsl	870	MC U15	870	11
	10	dsl	870	MC U15	870	11
	14	dsl	1140	MC U40	1140	18
Continental Drlg	2	d-e	2600	Idco E1700	1700	19
	11	d-e	2600	Idco E1700	1700	19
	14	d-e	2000	Idco ED1200	1200	16
	33	d-e	2600	Idco E1700	1700	19
	42	d-e	3200	Idco E2100	2100	25
Cothrum Drlg	2	dsl	926	MC U15A	912	11.5
	3	dsl	1200	S/B N72W	912	12
	5	dsl	1525	BDW 650	912	14
	6	dsl	750	Emsco G500	600	7.5
	8					
	9	dsl	900	S/B N4	500	6.5
	10	dsl	1500	G-D 1500	2250	24
	11	dsl	250	G-D 210B	250	10
	14					
	16					
	17					
	20					
Culver Drlg	3	dsl	800	G-D 800	800	16
	4	dsl	800	S/B N45	700	10/ 4"
	6	d-e	2000	G-D 2100	2000	30/ 5"
	11	dsl	1500	MC U914C	1500	17
	16	dsl	800	G-D 700	800	14
Deutsche Tiefbohr	T-12					
	T-2					
Eljay Drlg	3	d-s	3400	Olwl E3000	3000	30
Faith Drlg	2	dsl	1500	Nat 55	1300	12
Hurt & Assoc, Clint	12	dsl	1200	Wils 75	900	11
J 3 Drlg	2	dsl	1650	MC U36A	950	14
	3	dsl	1100	MC U34B	750	8.5
	4	dsl	1100	MC U34B	750	8.5
	5	dsl	2470	MC U914	2470	20
Johnn Drlg	5	dsl	700	MC U15	700	8.5
	10	dsl	800	Olwl 66	800	10
Justiss Oil	5	dsl	450	Beth S45E	300	6.5
	14	dsl	800	Emsco GB500	900	11
	25	dsl	250	Emsco GC350	450	12
	30	dsl	1000	Beth 1013	1400	17
	31	g-b	500	Wils Giant Roadair	650	10
	32	g-b	700	Beth 450	900	12
	36	dsl	1000	1013	1200	16
Ladrido Drlg	1	dsl	1600	MC U15	1050	13.5
Norwood, A N	1	dsl	450	Wils Super 38	350	5.5
	2	dsl	700	S/B N4	450	6
	3	gas	1000	S/B N4	450	6
	4	dsl	600	Nat T20	450	6
Padre Drlg	3	dsl	700	RMI	800	10
	9	dsl	1300	S/B 4610	450	8.5
PRC Drlg	1	dsl	840	S/B RR600	385	8
	2	dsl	804	MC U34	385	7.5
	4	dsl	1040	Cbot 2345	770	10
	6	dsl	1817	S/B N75A	1040	14
Rio Colorado Drlg	119	dsl	1300	Emsco A800	1600	12/ 5"
	141	dsl	1200	Nat T45	900	10.5
	145	dsl	2000	Nat 110	1650	18
Safari Drlg	1	dsl	640	MC U15	640	10
Sojourner Drlg	7	dsl	350	MC U15	7500	7.5
	10	dsl		MC U15	550	7
Texas Drlg	2	dsl	1700	S/B N7	1200	11
	3	dsl	1700	Nat 50A	1200	11
	7	dsl	1700	Cbot 900	900	10
	8	dsl	2000	Cbot 2550	1200	14
	9	dsl	1800	Emsco D2	1200	14
Tommy's Oilwell Drlg	2	dsl	800	Beth S50	476	7
	6	dsl	476	Wils 550		5.5
	7	dsl	800	S-H 5000	476	7
	8	dsl	800	SOS 6000S	650	8
	9	dsl	800	Crdw L	500	4
Transcontinental Drlg-Magnolia	2	gas	500	Emsco GB350	500	8.5
	5	dsl	1050	Olwl 76	1050	11.5
	35	dsl	1000	G-D 800M	1000	15
Tucker Drlg	1	dsl	750	S/B N55	750	10
	4	dsl	214	MC U15	450	7.5
	7	dsl	375	Beth 560	600	7
	9	dsl	750	Nat	750	10
Verna Corp	12	dsl	500	MC U15	600	11.5
	19	dsl	550	MC U15	800	11.5
	26	dsl	500	Idco H40	750	8
Wes-Tex Drlg	22					
Westburne WW Drlg	56	dsl	2000	Nat 1320UE	2000	20
TEXAS (Cont'd)						
ANDERSON						
Spartan Drlg	9UE	d-e	1000	Sup 1000E	1000	16
ANDREWS						
BB&C Drlg	1	dsl	350	Unit U34B	425	6
BJM Drlg & Expl	2	dsl	800	N 4213	600	8.5
	6	dsl	1200	MC U15	1000	12
Cactus Drlg	20	dsl	850	S/B N45	1080	7
Cherokee Drlg & Dev	5	dsl	900	BDW 450	531	7
Kenai Drlg	15	dsl	600	Emsco GB500	80	11
	17	dsl	800	S/B N4	580	7
	25	dsl	700	Emsco GB500	800	11
M G F Drlg-Midland	1	dsl	750	Beth M58	750	12.5
Moran Bros	58	dsl	1300	Cbot 750	750	9
	71	dsl	500	Nat 370	550	8.5
Rio Colorado Drlg	138	dsl	1750	Idco H1000	1000	12
	139	dsl	1200	Nat T45	900	11.5
	143	dsl	1200	Nat T45	1100	12.5
Rod Ric	3	dsl	670	S/B N45M	820	10
	4	dsl	750	Idco H40	600	8.5
	7	dsl	900	W-M Hellhoist	900	10
	9	dsl	750	Idco H35	600	8
Sharp Drlg	47	dsl	790	Beth M58	988	13.5
TMBR Drlg	1	dsl	350	MC U15CA	500	6
	2	dsl	350	Weis W45	450	7
	10	dsl	1300	Beth 650M	750	10
	30	dsl	350	MC U15	500	7
Verna Corp	13	dsl	600	S/B N4	400	6.5
ANGELINA						
Lagersen Drlg	5	d-e	1600	Emsco J750E	1250	16
Noble Drlg	OW-77	dsl	800	Olwl 760	800	14
ARCHER						
Bearden Drlg	2	dsl	1500	Wils 75	900	9
Megargel Drlg	4	dsl	350	Beth S45B	275	5.3
	10	dsl	750	MC U15	750	7
ASSUMPTION						
Wilson Bros Drlg	11	dsl	2400	Nat 110	2700	20
ATASCOSA						
Willis Drlg	9	dsl	1000	G-D 700	1000	12
BASTROP						
M G F Drlg-Houston	8	dsl	600	S/B N55	550	10.5
BEE						
Delta Drlg	63	d-e	2600	Emsco C1 Type II	2592	16
Forex Neptune and/or Affil	51	d-e	3200	G-D 1500E	2000	21.7
BORDEN						
Douglas Drlg	1	dsl	700	Nat 50CA	700	10
McCutchen Drlg	3	dsl	820	Wils Atlas Roadair	820	10.5
	4	dsl	820	Wils 90	820	12
Robinson Drlg of Texas	5	dsl	750	MC U15	900	9.5
Tri-Service Drlg	2	dsl	1400	Olwl 66	900	10
TMBR Drlg	13	dsl	700	MC U15CA	500	10.5
	22	dsl	700	S/B N75	750	14
Wes-Tex Drlg	9	dsl	700	Nat 50A	700	10
	17	dsl	335	MC U34	500	8
BRAZORIA						
Bawden Int'l	31	d-s	2000	Nat 110UE	1500	18
Frio Drlg	2	dsl	800	Nat J45	600	10
	4	dsl	1100	Nat N55	1100	12
M G F Drlg-Houston	39	dsl	2200	Nat 125	1500	20
Richards Drlg Assocs	10	d-e	3400	Olwl E3000	3000	30
	11	dsl	2500	Olwl 860	2400	18
Spartan Drlg	6E	d-e	600	Sup 700E	700	10
Wilson Bros Drlg	3	dsl	2600	Nat 1320	2700	30
	23	d-e	2800	Olwl E2000	2000	25
BRAZOS						
Atco Drlg Southern	4	dsl	1550	Nat 55	550	12
	19	dsl	1500	Olwl 66	700	10.5
	50	dsl	1850	Nat 100HD	750	15
	52	dsl	1500	MC U40	900	12
Basin Drlg	12	dsl	1470	G-D 700M	1220	14
McMurrey Petr	1	dsl	800	S-H	750	10
Nicklos Drlg	68	d-e	1500	Olwl 660E	1000	12.5
Spartan Drlg	7UE	d-e	600	Sup 700E	700	10
TEXAS (Cont'd)						
BROOKS						
Cinco Drlg	11	d-e	2000	Sup 1000	1000	16
Cliffs Drlg	29	dsl	2600	Nat 110	2475	20
Helmerich & Payne	37	dsl	2835	Olwl M2000	2835	22
San Patricio Corp	6	dsl	1500	Shaf 800	900	13
Sonat Southland Drlg	3	dsl	1650	S/B N75		12
BURLESON						
Nixon Drlg	2	dsl	300	Crdw	300	4
	7	dsl	400	Midway	600	6.5
Sterling Drlg	12	dsl	1500	Nat 610	1100	13
	19	dsl	1110	S/B N46	770	11
CALDWELL						
Nixon Drlg	1	dsl	300	Crdw CatD	300	4
	4	dsl	300	Stuart	300	4
CALHOUN						
Mesa Drlg	3	dsl	675	Weis W45	550	8
Richards-Armstrong	6	dsl	2500	Olwl 860	2400	18
CALLAHAN						
Hack Drlg	1	dsl	350	S/B N4	350	7
	4	dsl	225	Nat T8	250	4
Jones Drlg Co	51	dsl	425	S/B N4	425	6
	55	dsl	450	Beth S45	425	7
Safari Drlg	6	dsl	300	Emsco U34	370	6
CAMP						
Cape Drlg	5	dsl	400	W-N Apache 95040	425	6
Dixon Drlg	7	dsl	1700	S/B N46	950	13
CARSON						
Hudson Drlg, Leonard	8	dsl	300	Wils Mogul	450	5.5
Service Drlg	1	dsl	300	MC U34	300	4.5
CASS						
Nowotny & Conley Drlg	7	dsl	1600	Nat 610	1000	12.5
CHAMBERS						
Goldrus Drlg	21	dsl	1200	Cbot 1000	872	13.5
Harris Well Serv	30	dsl	2000	Idco 1200	1400	13.5
M G F Drlg-Houston	31	dsl	700	Olwl 76	900	12
	37	dsl	500	G-D 500	700	9
M G F Drlg-Lafay[illegible]	43	dsl	1800	Olwl 96	1200	18
CHEROKEE						
Gibson Drlg	12	dsl	900	Emsco D2	900	12
Rainbow Drlg	5	dsl	2000	Cbot 1200	1200	15
	6	dsl	1600	Cbot 900	900	11
CLAY						
Bennett Prod Corp	1	dsl	900	MC U15	900	13
Burns Drlg	3	dsl	800	Wils 75	780	10.5
	5	dsl	744	Beth S55	780	10
COCHRAN						
Sitton Drlg	5	dsl	450	Wils 75P	900	11.5
COKE						
Bandera Drlg	6	dsl	600	MC U34	360	6.5
GCO Drlg	1	dsl	640	Nat T20	450	7.5
COLEMAN						
Safari Drlg	3	dsl	340	S/B N4	300	7
	8	dsl		Detroit Diesel 8V		8
COLORADO						
Buzzini Drlg	8	dsl	1400	Olwl M2000	2000	20
Cliffs Drlg	42	d-e	2600	Nat 1320UE	3025	25
Frio Drlg	3	dsl	900	S/B N55	900	10.5
Loffland Bros	322	dsl	1800	G-D 800	2100	16
Padre Drlg	4	dsl	500	S/B H4210	400	7.5
Richards-Armstrong	7	dsl	1900	Cbot 1000	900	12.5
COMAL						
Loffland Bros	110	dsl	2160	S/B N12	2400	20
	331	dsl	2160	MC U1220	2400	20

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
COOKE						
Arbuckle Drlg	1	del	700	BDW 400T	500	8.5
Burns Drlg	1	del	1360	Sea Coast 10004S	780	14
Felderhoff Bros Drlg	1	del	285	Wils Mogul	185	5.5
	2	del	95	Wils Giant	650	9.5
	3	del	600	MAC 400	350	7.5
Jones Drlg Corp	9	gas	816		800	14
	11	del	600		600	10
COTTLE						
Sojourner Drlg	6	del		MC U15	560	7
CRANE						
BJM Drlg & Expl	4	del	1200	MC U15	1000	12
John Drlg	8	gas	800	S/B N75	800	12.5
	9					
Resource Drlg	RD-26	del	1560	Nat 80B	1835	14
Tahoe Drlg	1	del	550	Nat 50	550	11.2
TMBR Drlg	25	del	700	G-D 500	700	11
Verna Corp	11	del	550	MC U15	810	11.5
	14	del	500	Wils Mogul 42	550	7
	20	del	1000	Verna Drlg	1500	16
	34	del	1000	Emsco A800	1200	15
CROCKETT						
D B Drlg	12	del	1040	Nat 100	1040	16
Delta Drlg	2	del	1400	G-D 700M	784	12.5
	4	del	2150	Nat 100	1560	16
	73	del	500	S-H 7000	440	9
Dual Drlg	36	d-e	2000	Emsco D3	1000	16
Kenai Drlg	32	del	1200	Emsco GA500	800	11
Transcontinental Drlg-San Angelo	95	del	750	G-D 500	750	12
Wes-Tex Drlg	15	del	335	S/B N4	500	8
CROSBY						
D B Drlg	6	del	1150	S/B N45	575	9
Norton Drlg	11	del	550	Wils 75	900	12
CULBERSON						
Kenai Drlg	2	del	2000	Emsco J1250	1800	15
Parker Drlg	16	gas	1000	Olwl 76	1000	16
DAWSON						
D B Drlg	23	del	125	Unit U15	800	10
GCO Drlg	5	del	820	MC U15	850	9.5
Hurt & Assoc, Clint	9	del	1300	Wils 75	900	11
Landis Drlg	1	del	1000	BDW 650M	1000	13
	3	del	800	S/B N55	900	11.5
Sterling Drlg	20	del	1260	Nat 610	840	13
Wes-Tex Drlg	10	del	300	S/B N4	500	8
	18	del	600	Nat 50CA	900	10
DE WITT						
Buzzini Drlg	9	del	1400	Olwl M2000	2000	20
Grace France Drlg	3	el	2400	Olwl E760	2400	17
Richards Drlg Co	2	del	1500	S/B N75	1200	12.5
DICKENS						
Wes-Mor Drlg	1	del		MC U15		8
DIMMIT						
Bearden Drlg	10					
Dixon Drlg	9	del	700	S-H 5000 Port	450	6
Texas Drlg	6	del	1700	Cbot 900	900	10
DUVAL						
Alco Drlg Southern	59	d-e	2600	Emsco 11C	2000	18
	61	d-e	2600	Emsco IIC	2000	20
Buzzini Drlg	10	del	1400	Olwl M2000	2000	20
	11	del	1700	Olwl E3000	3000	30
Delta Drlg	99	d-e	3200	Emsco C2	3456	25
Harkins & Co	5	del	1200	Cbot 750	650	9.5/ 4"
Pearl Expl	1	del	600	Wils 65	500	7
Quarles Drlg	11	del	2700	MC U914C	2400	22
EASTLAND						
J & W Drlg	1	g-d	180	Harris 5000	340	5
	2	gas	180	Idco 150	180	3.5
	3	del	280	Wils Mogul 42	440	6
ECTOR						
Cactus Drlg	61	del	550	Nat T20	460	6
	62	del	550	Idco H35	454	6
	69	del	750	Nat 370	718	10
	70	del	800	Nat 370	916	10
D & R Drlg	2	st	2000	Emsco EDA	1700	20
Drillers	24	del	900	S/B N55	900	12
Johnn Drlg	4	del	700	MC U15	700	8.5

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ECTOR (Cont'd)						
Kenai Drlg	10	del	365	Emsco GA250T	400	6
	16	del	700	Emsco GA500	786	11
	19	del	825	Emsco GA500	800	11
Moran Bros	4	el	1500	Emsco A800E	1000	15
	72	el	1300	Nat 110UE	1500	20
Penrod Drlg	102	del	1600	Nat 610M	964	16
Santa Fe Drlg	SFW-10	d-e	2000	Emsco Electrohoist H11	1800	24
	SFW-12	d-e	2300	Emsco A1100E	1800	20
	SFW-14	d-e	3200	Emsco C3111	3000	30
	SFW-3	d-e	2900	Emsco A1500E	2000	30
	SFW-4	d-e	2800	Emsco C3111	3000	30
	SFW-6	d-e	2300	Emsco C3111	3000	30
	SFW-8	d-e	2800	Emsco A1500E	2000	30
	25W	d-e	1000	Nat 80UE	1000	12
	26W	d-e	1000	Nat 80UE	1000	12
Sierra Drlg Co	5	del	500	Weis W45	400	7.5
TMBR Drlg	23	del	1100	Nat 75CA	1100	14
	26	del	700	G-D 500	700	11
Verna Corp	15	del	600	MC	600	11.5
	17	del	550	MC U15	650	11.5
	18	d-e	1000	Nat 1320E	2000	22
	31	del	1212	MC U15	800	11
	38	del	1212	MC U15	800	11
	40	del	700	MC U15	800	11
EL PASO						
Loffland Bros	37	d-e	2180	MC U914B	2400	20
ELLIS						
Jay-Lan Corp	3	del	340	Wils 42	825	5/5"
ERATH						
Lynx Drlg	1	del	1000	MC U15	720	10
	3	del	500	Idco H30	360	7
FALLS						
Nicor Drlg	73	d-m	1500	Cbot 2550TRD	1200	15
FAYETTE						
Blocker Drlg	25					12
Houtech Energy	801	del	1500	Seaco 1400M	1300	15
	802	del	1600	G-D 700M	1200	15
Resource Drlg	RD-28	del	1040	Nat 610	1220	12
	RD18	del	1040	Nat 610	1220	12
Sterling Drlg	1	del	350	MC U34	285	4.6
	5	del	350	Emsco GB350	600	7
	7	del	850	Nat 50A	900	12
	10	del	1400	S/B N75	1100	13
	15	del	1400	S/B N75	1100	14
	18	del	1250	Nat 610	1100	13
Williams Drlg of South TX	1	del	585	Cbot 750	750	9.5/ 4"
FISHER						
Herb Expl	1	g-b		Fail 1500	10	15/ 2.38"
Safari Drlg	7	del	480	Emsco G42	560	7
Sojourner Drlg	3	del		MC U15	550	7
Wes-Tex Drlg	19	del	600	S/B N4	600	8
FOARD						
Burns Drlg	2	del	900	Wils 75	780	10.5
Moran Drlg, E W	18	del	1200	S-H 7000	40	9.5
FORT BEND						
Delta Drlg	80	del	1300	S-H 7000	480	9
Rio Grande Drlg	8	del	550	Nat 370	770	10
FRANKLIN						
Lelta Drlg	54	del	2000	Nat 80B	1560	14
FREESTONE						
Basin Drlg	11	del	1470	G-D 700M	1220	14
Delta Drlg	5	del	2000	Nat 100	1560	16
Dual Drlg	7	del	2100	Nat 1320M	2000	25
FWA Drlg	26	del	2000	G-D 800M	1580	14
	28	del	2700	G-D 1100M	1500	18
Hinton Drlg, W B	6	del	1800	Nat 80B	1650	15
Maxwell Herring Drlg	18	del	2475	G-D 1100	2475	20
Murco Drlg	42	d-e	2800	Olwl E2000	2000	25
Noble Drlg	N-81	del	1420	Nat 80	1420	14
O'Neal Drlg	14	del	15000	Nat 80B	1500	15
	15	d-e	2000	G-D 800	1500	18
Verna Corp	28	del	1000	MC U15	800	10

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
FRIO						
Bearden Drlg	6	del	1200	Wils 75	900	9.5
Cinco Drlg	6	del	1015	MC U15	780	11
F & N Drlg	1	del	525	Kremco KB60	600	8
GAINES						
BJM Drlg & Expl	1	del	600	MC U15	600	12
Cactus Drlg	53	del	850	Beth S55	670	7.5
	54	del	600	Beth S55	464	6
	64	del	700	S/B N45	670	7.5
	66	del	500	S/R N4	454	6
Cherokee Drlg & Dev	3	del	1150	Wils 75	900	11
GCO Drlg	9	del	1450	Beth 650	850	14
Henley Drlg	219	del	600	S/B N46	950	12
Hondo Drlg	2	del	700	S/B N56	700	15
	6	del	700	MC U15	700	10
	9	del	700	S/B N45	700	10
	11	del	800	MC U15	800	11.5
Moran Bros	37	del	1000	Nat 610	750	12
Parker Drlg	65	gas	1600	Nat 100M	1600	23
Rod Ric	6	del	450	Beth S45E	450	7.5
	8	del	670	S/B N45	600	8
Sitton Drlg	7	del	450	Wils 75P	900	11.5
Sterling Drlg	2	del	350	MC RV34B	285	4.8
GALVESTON						
Goldrus Drlg	19	del	1110	Cbot 750	500	10
	23	del	870	Cbot 900	600	12
Pozos Intl Drlg Serv	1080	del	1500	Idco BIR8005	940	11
Resource Drlg	RD-21	del	2330	Nat 110	2740	18
Wilson Bros Drlg	5	del	2900	Nat 110M	2700	20
GARZA						
Douglas Drlg	2	del	900	BDW 650M	900	12.5
Mesa Drlg	2	del	675	Weis W45	500	8
Wes-Tex Drlg	5	del	550	Nat 50A	700	10
GLASSCOCK						
Cactus Drlg	25	del	1450	Idco L711	110	12
Delta Drlg	100	d-e	2000	Emsco D3	1560	16
Dual Drlg	19	del	2100	Olwl 760	1000	16
FWA Drlg	3	del	1250	Wils Super Giant	1040	13
	9	del	1150	Wils Giant	720	11.5
	30	del	1100	Wils Giant	900	10
Grace TRG Drlg	486	del	1200	I-R 2550	1500	16
Hondo Drlg	8	del	800	S/B N75	800	12.5
Kenai Drlg	28	del	1200	S/B N7	800	12
Moran Bros	66	del	1300	S/B N75A	750	15
Quarles Drlg	5	del	850	Nat 50A	500	12
Safari Drlg	4	del	310	Nat T20	270	6
	5	del	370	Emsco GA250T	280	5
Sterling Drlg	21	del	1180	S/B N46	770	11
Tri-Service Drlg	3	g-b	750	Olwl 76	750	13
	6	del	1800	Olwl 96	1800	16
Tucker Drlg	11	del	525	BDW 800	1200	14
TMBR Drlg	29					
Wes-Tex Drlg	4	del	650	Emsco G500	650	1
Willbros Drlg	3	del	600	MC U15	800	11
GOLIAD						
Corpus Christi Drlg	7	del	300	Wils Super 38	250	5.4
Helmerich & Payne	87	d-e	800	Nat 1625ME	3000	30
Nicor Drlg	9	del	2000	OIME 1500SL	1500	18
Resource Drlg	RD5	del	2330	Nat 110	2740	18
GONZALES						
Challenger Drlg	35	del	800	S/B N75	1200	12
Cinco Drlg	1	del	900	MC U15	780	11
	2	del	890	Nat T32	850	8
	4	del	1005	S/B N45	780	8.5
	9	del	1700	Beth 650	1100	16
Harkins & Co	10	del	1620	Emsco B1013	1620	16
Moran Drlg, E W	26	del	1300	CEI 750	750	11
GRAY						
Hudson Drlg, Leonard	7	del	900	Unit U15	900	11.5
GRAYSON						
Jones Drlg Corp	12	del	1200		1200	10
Moran Drlg, E W	1	del	1800	G-D 700	800	13
	3	del	1300	G-D 700	800	13
	17	del	1925	Wils 250	2000	22
Noble Drlg	N-87	del	1200	Nat 80B	1200	15
Viersen & Cochran Drlg	19	del	1200	Nat 610	850	12.5

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
GREGG						
Delta Drlg	69	dsl		S-H 7000	480	9
Gibson Drlg	3	dsl	820	Wils Mogul 42	666	6.5
Henley Drlg	9	dsl	4000	Emsco C2	2000	25
Rosamond Drlg	10	e-s	550	Olwl 500	600	10
GRIMES						
Moran Bros	38	el	3200	Emsco C2 Type II	2000	25
	175	el		MC 1220EB		25
GUADALUPE						
Nixon Drlg	3	dsl	300	Crdw	300	4
HANSFORD						
Baker & Taylor Drlg	9	dsl	870	MC U15	870	11
Moran Drlg, E W	24	dsl	1200	S-H 7000	400	9.5
Sage Drlg	4	dsl	350	S/B N42	500	11
Service Drlg	3	dsl	300	MC U34	400	6.5
HARDEMAN						
Bearden Drlg	8	dsl	1200	Wils 75	900	9.5
Bennett Prod Corp	2	dsl	900	MC U15	900	13
	3	dsl	900	MC U15	900	13
	4	dsl	900	Permian 1000	900	13
Burns Drlg	6	dsl	1360	MC U36A	780	14
	7	dsl	1020	Unit U15	744	10
Dual Drlg	5	dsl	1200	Wils Mogul	600	9.5
Lee Drlg	2	dsl	850	BDW 450T	550	9
	3	dsl	1100	BDW 450T	700	9
Moran Drlg, E W	15	dsl	1200	Beth S60	400	10
	19	dsl	1400	Wils 75	900	11
	23	dsl	1400	Wils 75	900	11
Schlensker Drlg	2	gas	700	Beth MC450	900	12
Theiss Drlg	1	dsl	1450	S/B N46	1020	12
	2	dsl	1450	Emsco U15	1020	12
HARDIN						
Big 6 Drlg	7	dsl	800	Idco	600	10
Challenger Drlg	36	dsl	650	Nat G45	700	9.5
Dixilyn-Field Drlg	11	dsl	2600	Nat 110M	2331	18
Pozos Intl Drlg Serv	981	dsl	1890	S/B N46	940	12.5
HARRIS						
Atco Drlg Southern	53	dsl	1600	Nat 610UE	800	12
BSE Drlg	1	dsl	500	Wils Mogul 42	500	9
Challenger Drlg	37	dsl	2400	Idco 2500	2400	28
Frio Drlg	1	dsl	800	Emsco 350	550	9.5
Haning & Young Drlg	102	d-m	2000	OIME SL7	1000	12.5
	201	d-e	2600	S/B NE95	1700	19
	202	d-e	2600	S/B NE95	1700	19
Penrod Drlg	134	dsl	3200	Nat 1625DE	2000	30
Rosamond Drlg	14	d-e-s	2000	Nat 80UE	2000	16
Sloan Drlg	22	dsl	440	Mac 300	450	7
Westburne WW Drlg	206	dsl	1400	Emsco A800E	1000	14
	207	dsl	1400	Nat 110UE	1500	18
	208	dsl	1400	Emsco C1	1500	18
	209	dsl	1400	Emsco C1	1500	18
	214	dsl	2000	Nat 1100EH	1500	18
Wilson Bros Drlg	18	dsl	1300	Nat 110	3300	20
HARRISON						
Lester Drlg, Dan	8	dsl	1650	Olwl 760	1500	16
Lohmann Drlg	17	gas	800	MC U15 SN356	600	10
Rainbow Drlg	3	dsl	1600	Cbot 900	900	11
Rosamond Drlg	7	dsl	1275	S/B N10	1275	12.5
Schlensker Drlg	20	dsl	1270	Nat 75CA	1270	14
Spartan Drlg	32			MC U15		11
HARTLEY						
Grace TRG Drlg	23	dsl	1400	Nat 80B	1305	16
HASKELL						
Hack Drlg	3	dsl	350	Beth S45E	350	7
Sojourner Drlg	2	dsl		MC U15	550	7
HEMPHILL						
Baker & Taylor Drlg	8	dsl	870	MC U15	870	11
Helmerich & Payne	80	d-e	2200	Nat 110UE	1500	20
Moran Bros	68	el	3200	Emsco C2	2000	25
Moran Drlg, E W	13	dsl	1450	G-D 700	800	13
Parker Drlg	218	gas	1400	OIME 1000C	1400	18
Service Drlg	12	dsl	1000	Emsco D2	800	12
Slawson Drlg	6	dsl	360	Idco H525	480	8.5
HASKELL (Cont'd)						
Unit Drlg & Expl	14	dsl	1000	G-D 700	1300	16
Zenith Drlg	9	dsl	1200	G-D 800	1200	16.5
HENDERSON						
Delta Drlg	64	dsl	1500	Emsco D2 Type III	784	11
	90	d-e	2000	Emsco D3 Type II	2592	16
Helmerich & Payne	89	d-s	2730	Nat 110UE	2730	20
Maxwell Herring Drlg	3	dsl	1350	G-D 800	1350	13.5
	15	dsl	1475	S-H 7000	518	10
	21	dsl	1709	S/G N75A	1059	13
Murco Drlg	38	d-e	1700	Olwl 660E	700	12
Sawyer Drlg & Serv	11	dsl	600	Wils Giant	400	9
Schlensker Drlg	3	dsl	700	Olwl 760	1500	14
HIDALGO						
Atco Drlg Southern	18	d-e	2000	Nat 80UE	1000	15
Delta Drlg	89	d-s	2000	Emsco D3 Type II	2592	16
	95	d-e	2900	Emsco CI Type II	3456	20
Dixilyn-Field Drlg	24	dsl	2800	Olwl 860	2331	18
Harkins & Co	11	dsl	1260	S/B N75	1260	12.5
Magee-Poole Drlg	5	dsl	1500	Cbot 900	950	11/4"
	9	dsl	2350	Cbot	1500	16
Resource Drlg	RD-24	dsl	2330	Nat 110	2740	18
	RD16	dsl	1560	Nat 80B	1835	14
	RD8	dsl	2330	Nat 110	2740	18
Williams Drlg of South TX	3	dsl	800	Idco BIR8085	950	11.5/4"
Willis Drlg	1	dsl	750	Emsco 450	1000	12
	2	dsl	750	Emsco 450	1000	12
	4	dsl	1000	S/B N85	1200	15
HOCKLEY						
D & R Drlg	1	st	1600	Nat 3410FE	1600	17
Kenai Drlg	13	dsl	800	Emsco GA250T	400	6.5
Norton Drlg	1	dsl	450	Wils 65P	850	10
	4	dsl	550	Wils 75	850	10.5
	7	dsl	450	Wils 65	650	8.5
Sitton Drlg	1	dsl	450	Wils 600	525	6.5
	8	dsl	650	Wils 75P	900	10
Verna Corp	1	dsl	600	S/B N55	800	12.5
	3	dsl	500	S/B N45	500	6.5
	4	dsl	500	S/B N4	500	6.5
	5	dsl	500	Wils Mogul	500	6.5
	6	dsl	550	S/B N55	800	12
	7	dsl	700	MC U15 Type	800	11
	8	dsl	500	Idco H40	500	6.5
	9	dsl	600	Idco H40	500	6.5
	33	dsl	550	MC U15	800	9
	36	dsl	550	MC U15	550	11
	39	dsl	600	MC U15	550	11
Willbros Drlg	6	dsl	800	Emsco G500	800	12
HOPKINS						
Lester Drlg, Dan	9	dsl	1500	Olwl 760	1500	16
HOUSTON						
Challenger Drlg	56					
Forex Neptune and/or Affil	46	d-e	3200	G-D 1500E	2000	21.7
	52	d-e	3200	G-D 1500E	2000	21.7
Gibson Drlg	11	dsl	1200	Emsco D2	1200	12
Nicklos Drlg	70	d-e	1700	Olwl 760E	2000	15
Parker Drlg	129-HH/ 17	dsl	1500	OIME TBA2000	2000	20
	133-HH/ 21	dsl	1500	OIME TBA2000	2000	20
HOWARD						
Cactus Drlg	58	dsl	550	Beth S45E	454	6
Grace TRG Drlg	3	d-m	1245	G-D 700M	1100	13
	301	dsl	1000	Wils 75	900	12
GCO Drlg	6	dsl	820	BDW 650M	650	9
Moran Bros	54	dsl	970	Nat T20	300	6
Riley Drlg	3	dsl	300	MC U34	225	4
Robinson Drlg of Texas	2	dsl	750	MC U15	900	10
	3	dsl	750	MC U15	900	10
TMBR Drlg	16	dsl	700	Nat 50CA	600	10.5
Wes-Tex Drlg	16	dsl	335	S/B N4	500	8
HUTCHINSON						
Diatom Drlg	2	dsl	630	I-R 600	650	10
Service Drlg	6	dsl	300	MC U34	300	4.5
	7	dsl	300	Beth S45	300	5.5
	11	dsl	400	MC U34	400	5
IRION						
Bearden Drlg	9	dsl	1200	Wils Mogul Super 42	900	9
D B Drlg	5	dsl	585	S/B N4	450	8
	9	dsl	840	Schf 50560006	450	3.5
	11	dsl	720	Nat T32	575	8.5
FWA Drlg	12	dsl	915	Wils Giant	900	10
GCO Drlg	8	dsl	1000	Nat 370	650	10.4
Mellon Drlg	1	dsl	750	Emsco GB250	570	7.8
	2	dsl	1300	Emsco GB350	750	10
Transcontinental Drlg-San Angelo	34	dsl	674	Beth S55	650	8
Tucker Drlg	5	dsl	750	Emsco GE500	750	10
	6	dsl	750	S/B N75	750	12
TMBR Drlg	3		600	Weis W45	450	7
	31	dsl	600	MC U15	500	7
	32	dsl	1200	Nat T16		
Wes-Tex Drlg	2	dsl	650	Beth S45E	650	10
JACK						
Bearden Drlg	12					
Burns Drlg	9	dsl	550	Hoop GTXXA	425	6.5/4"
C M D Drlg	1	dsl	750	Wils Mogul 42	398	7
Megargel Drlg	2	dsl	750	MC U15	750	7
JACKSON						
Blocker Drlg	17	dsl	825	S-H	530	7
Frio Drlg	5	d-e	1000	Idco ED1200	1200	16
M N D Drlg-Southern	5	dsl	1536	S/B N95	1536	18
	12	d-e	1820	MC U712	1200	16
	14	d-e	1820	MC U712	1200	16
Magee-Poole Drlg	14	dsl	1475	Cbot Explorer III	700	9/4"
Padre Drlg	6	dsl	500	S/B H4210	400	7.5
PRC Drlg	8	dsl	2331	S/B N95A	2331	18
	9	dsl	1790	RMI 4610	1040	14
	10	dsl	1084	Coop LTO700	550	16
South Texas Drlg	4	dsl	1000	S/B 1046	750	10
JEFFERSON						
Big Chief Drlg	11	dsl	1350	S/B N75	1350	13
	22	gas	1600	Nat 80B	1600	14
	25	dsl	3000	Nat 110	2000	20
	35	gas	2610	Nat 110	2610	20
	44	dsl	2400	S/B N95	2400	20
Cliffs Drlg	33	dsl	2000	Nat 80B	1650	14.5
Drillers	10	dsl	1600	Nat 100M	1600	18
	11	d-h	1500	Automatic H2030	2000	12
	15	dsl	1000	Olwl 66	800	12
	30	dsl	800	Unit U15M	1000	11
	39	d-e	1200	Idco 700E	1000	14
Eljay Drlg	1	d-s	2800	Olwl E2000	2000	25
Kelley Onshore Drlg	11	d-e	1700	Olwl 750	750	12
Nicklos Drlg	74	d-e	2800	Olwl E2000	2000	25
Pozos Intl Drlg Serv	81	dsl	1890	S/B N46	940	12.5
Richards Drlg Ltd	9					
Rosamond Drlg	8	dsl	2475	Nat 130	2475	20
JIM HOGG						
Cinco Drlg	12	d-e	3000	Nat 1320UE	2400	24
Delta Drlg	88	d-s	2600	Emsco C1 Type II	3456	18
Penrod Drlg	124	dsl	1600	Nat 1625M	3000	30
JIM WELLS						
Challenger Drlg	46	dsl	900	Idco 750	900	10
Dixilyn-Field Drlg	2	dsl	1600	S/B N7.5	1040	12
	9	dsl	2650	Nat 130	2331	20
	10	dsl	1295	Nat 55	1040	12
Harkins & Co	13	dsl	1477	Cbot 1000	1000	12
Magee-Poole Drlg	6	dsl	2000	OIME SL7	1300	16.8
	7	dsl	1130	Cbot 750	608	9/4"
	15	dsl	1475	Cbot Expl III	700	9/4"
Murlynson Drlg	10	dsl	1000	MC U15	600	10
KARNES						
Delta Drlg	81	dsl	1300	S-H 7000	480	9
KAUFMAN						
Capc Drlg	6	dsl	1500	MIDWAY 750D	800	13.5
KENEDY						
Cinco Drlg	14	d-e	2400	OIME SD5	1500	14
Delta Drlg	20	d-s	2800	Emsco C2 Type II	3456	20

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
KENEDY (Cont'd)						
Harkins & Co	14	dsl	1150	Cbot 900	900	11/ 4"
Magee-Poole Drlg	4	dsl	1500	Cbot 900	950	11/ 4"
	10	dsl	1500	Cbot 900	950	11/ 4"
Moran Bros	39	el	2800	Emsco C1 Type II	1500	20
Willis Drlg	7	dsl	1350	S/B N95	2400	20
	8	dsl	1000	BDW 800	1000	12
KENT						
Verna Corp	10	dsl	700	MC U36A	1200	12
KING						
Mesa Drlg	1	dsl	725	TSM 6000	450	7.5
Wes-Mor Drlg	4	dsl	400	MC U15		7.5
	5	g-b	465	MC U15	290	7.5
KLEBERG						
Harkins & Co	12	dsl	1050	Cbot 750	650	9.5/ 4"
Pearl Expl	2	dsl	600	Wils 65	600	8.5
Willis Drlg	5	dsl	7500	S/B N75	1000	12
KNOX						
Bandera Drlg	1	dsl	750	MAC 300	475	7.5
Bearden Drlg	1	dsl	1200	Wils Mogul Super 42	750	9
Lee Drlg	1	dsl	1100	BDW 450T	500	9
LA SALLE						
Bearden Drlg	3	dsl	1200	Wils Mogul Super 42	750	9.5
Blocker Drlg	8	dsl	1820	Cbot Expl III	1400	14
South Texas Drlg	5	dsl	500	S/B N45	500	8
LAVACA						
B D K Drlg	1	dsl	1000	Wils Giant	580	8.5
	9	dsl	1480	S/B N75	1000	12
Delta Drlg	17	d-e	2300	Emsco C1 Type II	2592	16
FWA Drlg	24	dsl	1350	Wils Mogul 42	720	11
Harkins & Co	9	dsl	2100	Emsco A1100	2100	18/ 5"
Magee-Poole Drlg	2	dsl	1500	OIME 750SL	1155	14
Richards Drlg Co	12					
Rio Grande Drlg	9	dsl	1300	Nat 110M	2400	20
Spartan Drlg	17E	d-e	1000	Olwl 750E	1000	16
LEA						
Cactus Drlg	67	dsl	550	Nat T32	454	6.5
LEE						
Challenger Drlg	48	dsl	1000	Unit U36	1000	13
M G F Drlg-Houston	7	dsl	700	MC U15	800	11
Resource Drlg	RD-20	dsl	1040	Nat 610	1220	12
	RD19	dsl	1040	Nat 610	1220	12
Spartan Drlg	15E	d-e	600	Sup 700E	700	12
LEON						
Gibson Drlg	2	dsl	526	Wils Mogul 65	398	5
	10	dsl	1200	Emsco D2	1200	12
Hinton Drlg, W B	11	d-e	2600	Nat 1320UE	3000	25
Murco Drlg	30	dsl	2800	Olwl N200B	3000	25
Sonat Southland Drlg	7	dsl	1450	S/B N55		10
Spartan Drlg	12UE	d-e	500	Sup 700E	700	10
	16UE	d-e	800	Sup700E	700	10
LIBERTY						
Aguila Drlg	11	mch	250	Trailer Mounted		6
Big 6 Drlg	8	d-e	1600	Nat 610	900	12
Cliffs Drlg	31	dsl	2600	Nat 110	2475	20
Goldrus Drlg	5	d-e	3400	Olwl E2000	1700	20
	18	dsl	1700	1000 Cbot	872	14
Harris Well Serv	35	dsl	600	Wils 75	900	10
Loffland Bros	118	d-e	3300	MC U1220EBD	3300	25
Richards Drlg Co	5	g-b	1200	S/B N75	900	12.5
Wilson Bros Drlg	12	dsl	1850	Nat 110	1850	16
LIMESTONE						
Butler-Johnson	2	dsl	1900	S/B N65	1900	15
M N D Drlg-Southern	2	dsl	1794	S/B N75	1024	14
Maxwell Herring Drlg	22	dsl	1775	Wils 75	1100	10
LIPSCOMB						
Hudson Drlg, Leonard	1	dsl	900	MC U15	900	11.5
	5	dsl	900	S/B N7	900	11.5
Mercury Drlg	2	dsl	1500	MC U15	950	12
	4	dsl	1500	MC U15	950	12
Service Drlg	13	dsl	400	MC U1500	800	12
LIPSCOMB (Cont'd)						
Triad Drlg	4	dsl		S/B N7	800	11
Unit Drlg & Expl	1	dsl	500	MC U15	800	11
	7	dsl	500	MC U15	800	11
LIVE OAK						
Corpus Christi Drlg	5	dsl	300	Wils Super 38	250	6
Dixilyn-Field Drlg	12	dsl	2600	Nat 110M	2331	18
Loffland Bros	88	d-e	2160	MC U712	2400	16
	104	d-e	3300	Emsco 3000	3300	35
Moran Bros	173	el		MC U914EC		20
Penrod Drlg	132	dsl	1000	Nat 80B	1760	
Sonat Southland Drlg	4	dsl	1450	S/B N7		10
LOVING						
Cactus Drlg	2	dsl	2200	Nat 110 M	2550	20
	30	dsl	2000	Nat 110	1650	20
	55	dsl	600	Idco H35	670	6.5
Cliffs Drlg	27	dsl	2600	Nat 1320	2475	25
Loffland Bros	112	d-e	3300	MC U1220EB	2200	25
Parker Drlg	39	gas	1600	OIME Hercules 2500M	1600	23
Rowan Drlg-US	8	dsl	2600	MC U1220S	2400	25
Santa Fe Drlg	SFW-16	d-e	1300	Emsco C11	2000	25
Sharp Drlg	43	dsl	2331	Olwl M2000	2742	30
	66	d-e	2331	MC U1220EB	2742	30
	72	d-e	2160	Olwl 840E	2430	22
LUBBOCK						
D B Drlg	1	dsl	550	S/B N4	450	6
MADISON						
M G F Drlg-Houston	38	dsl	1600	Emsco C1	1200	17
M N D Drlg-Southern	6	dsl	1540	G-D 500	770	10.5
Nicklos Drlg	69	d-e	1500	Olwl 660E	1000	12.5
Spartan Drlg	18UE	d-e	600	Sup 700E	700	12
MARION						
Nelcon Drlg & Well Serv	1	dsl	600	S-H 7000	600	9
Sawyer Drlg & Serv	2	dsl	400	S/B N4	400	8.5
MARTIN						
Hurt & Assoc, Clint	10	dsl	1200	Wils 75	900	11
	11	dsl	1200	Wils 75	900	11
Phelps Drlg Intl	21	dsl	1000	Nat 370	550	9.5
	22	dsl	1000	Nat 370	550	9.5
Resource Drlg	RD-23	dsl	1040	Nat 610	1220	12
	RD-25	dsl	1580	Nat 80B	1835	14
Robinson Drlg of Texas	4	dsl	750	Nat 50A	900	12.5
Sharp Drlg	64	dsl	1560	Olwl 760	1836	18
Tahoe Drlg	2	dsl	500	Emsco D2	500	11.2
	4	dsl	700	G-D 500M	700	14
Tri-Service Drlg	8	g-b	750	Olwl 76	750	13
TMBR Drlg	4	dsl	840	Nat 50CA	600	10.5
	6	dsl	700	Nat 75CA	750	12
	24	dsl	1100	G-D 700	1100	14
Wes-Tex Drlg	20	dsl	600	Nat 50CA	900	10
Willbros Drlg	7	dsl	1400	Emsco A800	1400	16
MATAGORDA						
Loffland Bros	107	dsl	2160	S/B N12	2400	17
M N D Drlg-Southern	10	d-e	1820	S/B N95	1820	20
Nicor Drlg	48	d-e	2700	MC U1220EB	2000	25
Padre Drlg	8	dsl	700	S/B H14610	750	10
Resource Drlg	RD14	dsl	2330	Nat 110	2740	18
	RD4	dsl	1560	Nat 80B	1835	14
Richards Drlg Co	8	dsl	2500	Olwl 860	2400	18
MC MULLEN						
Blocker Drlg	9	dsl	1115	Idco H1000	950	10
	15	dsl	1265	Cbot 900	950	10
Dixilyn-Field Drlg	23	dsl	2900	Olwl 860	2331	18
	25	d-e	1600	Nat 80UE	2000	15
Harkins & Co	3	dsl	1260	S/B N75A	1260	12.5
Loffland Bros	115	d-e	3300	MC U1220EBD	3300	30
Magee-Poole Drlg	1	dsl	1500	Cbot 900	950	11/ 4"
Nicor Drlg	51	d-m	1600	Idco H900M	1000	15
Pozos Intl Drlg Serv	80	dsl	1990	S/B N46	940	12.5
PRC Drlg	3	dsl	2237	S/B N46	1460	11.5
MEDINA						
Dixon Drlg	10	dsl	900	S/B N46	950	10
MIDLAND						
Cactus Drlg	3	dsl	1800	Nat 80B	1650	15
	4	dsl	950	Nat 55M	1100	13
	6	dsl	1300	Idco 711	1100	14
	9	dsl	900	S/B N75	1200	13
MIDLAND (Cont'd)						
Cactus Drlg	31	dsl	2000	Nat 1320	2550	25
	32	dsl	2000	Nat 1320	2550	25
	33	dsl	2000	Nat 110	2550	20
Cherokee Drlg & Dev	6	dsl		BDW 450	670	7
	7	dsl	1500	BDW 650	1050	12
Delta Drlg	61	dsl	1800	Idco Super 711	1640	15
FWA Drlg	11	dsl	1065	Wils Giant	900	11
	21	dsl	1000	Wils Mogul 42	720	10
M G F Drlg-Midland	2	dsl	800	MC U15	800	10
	9	dsl	850	Emsco GC500	850	14
	25	dsl	1725	S/B N95	1725	19
	201	dsl	1600	Nat 1320UE	2000	30
	202	dsl	1600	Nat 1320 UE	2000	30
	203	dsl	1300	Nat 110UE	2000	20
Robinson Drlg of Texas	6	dsl	950	S/B N75	1350	12.5
Sharp Drlg	61	dsl	2331	MC U914C	2742	23.5
Sterling Drlg	4	dsl	450	MC U15	285	5
	9	dsl	1350	S/B N75	1100	14
	16	dsl	1400	S/B N75	1230	14
	17	dsl	1500	S/B N75	1230	14
	22	dsl	1520	Nat 610	1100	13
Tahoe Drlg	3	dsl	7000	Emsco D1	700	14
TMBR Drlg	8	dsl	700	Nat 50CA	600	10.5
	27	dsl	1750	G-D 700	800	14
Wilson Bros Drlg	8	dsl	1750	Nat 110	1750	16
MITCHELL						
GCO Drlg	2	dsl	640	BDW 450	450	8
Riley Drlg	4	dsl	300	Cbot	300	4.5
MONTAGUE						
Burns Drlg	4	dsl	888	Wils 75	780	12/ 4"
Schlensker Drlg	4	gas	700	MC U15	800	10
	14	d-e	1300	MC U1220EB	2500	25
MONTGOMERY						
Challenger Drlg	20	dsl	900	S/B N75	1000	12
Henley Drlg	5	dsl	4000	Emsco C1	2000	18
M N D Drlg-Southern	3	dsl	1794	S/B N75	1024	12.5
	7	dsl	1540	BDW 800	770	10
	9	dsl	1540	G-D 500	770	10.5
	15	d-e	2000	MC U712	1200	16
Pozos Intl Drlg Serv	581	dsl	3000	S/B N12A	2650	25
Resource Drlg	RD15	dsl	1560	Nat 80B	1835	14
Richards Drlg Co	3	dsl	1800	S/B N75	1200	12.5
Sonat Southland Drlg	6	dsl	1100	Cbot		8.5
MOORE						
Baker & Taylor Drlg	18	dsl	700	Emsco GB250T	465	6
Diatom Drlg	1	dsl	458	I-R 550	574	7.5
NACOGDOCHES						
Butler-Johnson	14	d-e	2000	G-D 1100E	2000	20
Delta Drlg	15	dsl	1800	Emsco D3 Type III	1040	13.5
Exeter Drlg Southern	57	dsl	1500	Emsco D3	1500	16
Gibson Drlg	7	dsl	895	Emsco GB350	660	8.5
Murco Drlg	6	dsl	2200	S/B N95	1000	14
	62					
Rosamond Drlg	9	dsl	2300	G-D 700	1230	14
Schlensker Drlg	9	dsl	1500	OIME 1500SL	2205	18
Sonat Southland Drlg	2	dsl	1750	S/B N75A		12
NAVARRO						
FWA Drlg	20	dsl	1700	Wils Super Atlas	1040	14
Thunderbolt Drlg	53	dsl	1400	Wils 75	950	11
NEWTON						
Big 6 Drlg	6	dsl	800	Cbot	950	12
Challenger Drlg	29	dsl	720	Nat T45	860	9.5
NOLAN						
Bandera Drlg	11	dsl	925	BDW 450T	540	9
Dixon Drlg	8	dsl	900	S/B N42	650	8
	11	dsl	700	Nat T20	450	7.5
Wes-Tex Drlg	14	dsl	335	S/B N4	500	8
NUECES						
Cothrum Drlg	1	dsl	774	Emsco 350	636	9.5
Harkins & Co	4	dsl	1260	S/B N75A	1260	12.5
Willis Drlg	3	dsl	750	S/B N75	1000	12
OCHILTREE						
Baker & Taylor Drlg	12	dsl	870	MC U15	870	11

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
OCHILTREE (Cont'd)						
Bravo Drlg	2	dsl	870	BDW 800	870	14
	3	dsl	870	BDW 800	870	14
	4					
Hudson Drlg, Leonard	3	dsl	900	MC U15	900	11.5
	4	dsl	900	MC U15	900	11.5
	6	dsl	550	S/B N7	900	12
Service Drlg	4	dsl	500	MC U15	800	9.2
Slawson Drlg	7	dsl	480	Idco H525	480	11.5
Unit Drlg & Expl	19					
Zenith Drlg	3	dsl	1000	S/B N7A	600	12.5
	5	dsl	1200	BDW 800	800	16
OLDHAM						
Baker & Taylor Drlg	1	dsl	870	MC U15	870	10
ORANGE						
Big 6 Drlg	3	dsl	750	Cbot	600	11
PALO PINTO						
Megargel Drlg	16	dsl	500	Shaf S6000	500	8
PANOLA						
Butler-Johnson	3	g-b	1200	Emsco A550	1200	13.5
	6	dsl	2000	S/B N85	1900	15
	7	dsl	1100	Nat 55	1100	12
Globe Drlg	3	dsl	800	MC U15	800	12
	6	dsl	700	Emsco C50	700	10
Grace France Drlg	1	dsl	1600	G-D 700	900	13
	4	dsl	1300	G-D 500	800	11
McMurrey Petr	3	dsl	800	S-H	750	10
Nowotny & Conley Drlg	3	dsl	1750	S/B N46	1000	12.5
Rosamond Drlg	5	dsl	1275	Beth MC450	1275	12.5
Schlensker Drlg	8	dsl	635	Wils Mogul 42	475	7
PECOS						
Cherokee Drlg & Dev	2	dsl	1150	Wils 75	900	11
	4	gas	1150	Wils 75	900	11
Delta Drlg	3	dsl	2300	Emsco C1 Type III	2331	18
	36	dsl	2600	Emsco C2 Type III	2331	23
Dual Drlg	30	dsl	1250	Oilwl 500	600	9
FWA Drlg	14	dsl	900	Wils Mogul 42	600	7.5
Grace TRG Drlg	22	dsl	1290	Nat 80B	1305	16
Kenai Drlg	18	dsl	410	Idco H35	450	6.5
Loffland Bros	77	dsl	1450	Nat 100	1575	15
Parker Drlg	74	gas	1400	Nat 100M	1400	22.5
	87	gas	1800	Idco E2000	1800	25
	88	d-e	2700	Nat 130	3000	30
	121	d-e	2700	Idco E3000	3000	30
Penrod Drlg	114	dsl	1600	Nat 1625M	3000	30
	121	dsl	1600	Nat	3000	30
Quarles Drlg	6	dsl	2000	S/B N95	2200	22
Resource Drlg	RD2	dsl	1560	Nat 80B	1835	14
Sharp Drlg	34	dsl	2331	Beth 1013	2742	30
	38	dsl	790	Beth M58	988	12
	60	d-e	3108	Emsco C3 Type II	3656	30
	67	dsl	2331	MC U914C	2742	23.5
	73	d-e	4250	Emsco C3	4640	30
Tri-Service Drlg	5	g-b	1800	Oilwl 760	1400	16
	11	d-e	3000	MC 1220ED	3000	20
Wes-Tex Drlg	7	dsl	335	S/B N4	450	8
POLK						
Cliffs Drlg	28	dsl	2600	Nat 1320	2475	25
	32	dsl	2600	Nat 110	2475	20
Delta Drlg	6	dsl	2600	Emsco C1 Type III	2592	22
M N D Drlg-Southern	11	d-e	1820	S/B N95	1820	20
Woolf & Magee	6	dsl	650	Idco H35	500	10
POTTER						
Baker & Taylor Drlg	11	dsl	1140	Emsco GCA500	1140	12
Cheyenne Drlg	5	dsl	400	Nat T-20	450	5
Service Drlg	5	dsl	1000	MC U15	800	10
RAINS						
Delta Drlg	44	dsl	2000	S/B N95	1560	16
FWA Drlg	27	dsl	2000	G-D 800M	1560	15.5
Helmerich & Payne	79	d-s	2200	Nat 110UE	1500	20
REAGAN						
Bearden Drlg	5	dsl	1200	Wils 75	900	9.5
Big Chief Drlg	9	dsl	1200	Idco H35S	700	10
	41	gas	1400	S/B N75	900	12
BJM Drlg & Expl	3	dsl	1200	Nat 150AC	1000	12
	5	dsl	600	MC U15	600	12
Cactus Drlg	19	dsl	1050	Nat 50A	850	10
D B Drlg	7	dsl	1235	Nat 50A	850	11.5
	8	dsl	1025	Beth S55	800	10
	14	dsl	1210	Nat 50A	850	11.5
	25	dsl	125	Unit U15	800	10
REAGAN (Cont'd)						
FWA Drlg	1	dsl	1300	Wils Giant	900	11
	2	dsl	1100	Wils Super Giant	1040	13
	4	dsl	1385	Wils Giant	900	11
	8	dsl	1065	Wils Giant	900	11
	17	dsl	1400	Wils Giant	900	11
M G F Drlg-Midland	10	dsl	900	Beth M58	900	12
Sterling Drlg	3	dsl	800	Nat 370	770	9
	11	dsl	375	Idco H30	480	6.5
Transcontinental Drlg-San Angelo	30	dsl	750	S/B N55	750	10
	33	dsl	898	Unit U15	650	8.5
Tri-Service Drlg	4	g-b	700	Oilwl 66	750	10
TMBR Drlg	15	gas	700	MC U15	500	10.5
	17	dsl	350	MC U15CA	500	9
	18	dsl	500	MC U15CA	840	10
	33	dsl	700	Weis W45	600	9
Wes-Tex Drlg	12	dsl	335	S/B N4	500	8
REEVES						
Cliffs Drlg	38	d-e	2800	Oilwl 840E	3300	18
Henley Drlg	2	dsl	4000	Emsco C2	2000	25
Kenai Drlg	20	dsl	500	Emsco GB250T	400	6.5
Sharp Drlg	59	dsl	2331	Beth MC950	2742	23
Willbros Drlg	9	d-s	3000	Idco E1700	3000	25
Wilson Bros Drlg	20	dsl	800	Nat 80B	1425	16
REFUGIO						
San Patricio Corp	7	dsl	1000	S/B RR600	400	8
ROBERTS						
Hudson Drlg, Leonard	2	dsl	900	MC U15	900	11.5
Mercury Drlg	1	dsl	2000	Emsco GB800	1470	16
Sage Drlg	8	dsl	500	BDW 650	500	12.5
Service Drlg	8	dsl	800	MC U15	630	7
	9	dsl	1000	MC 800	800	10
Triad Drlg	14	dsl	1150	U-15	800	10
ROBERTSON						
Hinton Drlg, W B	7	dsl	1600	Nat 80B	1650	15
M N D Drlg-Southern	4	dsl	1540	G-D 1100	1540	18
Moran Bros	33	el	2300	Nat 110UE	1500	20
Schlensker Drlg	6	dsl	950	MC U15	950	10
	21	d-e	1300	G-D 1100E	1500	20
RUNNELS						
Bandera Drlg	7	dsl	750	MAC 300	400	7.5
Hack Drlg	2	dsl	350	S/B N4	350	7
Morrison Drlg & Prod	101	dsl	72.5	Nat T20	475	6
Safari Drlg	2	dsl	370	Crdw L350	370	7
Sojourner Drlg	1	dsl		MC U15	550	7
RUSK						
Gibson Drlg	1	dsl	606	Wils Mogul 42	398	5
	9	dsl	1030	Wils Mogul 75P	700	9
Hinton Drlg, W B	5	dsl	900	S-H 7000	450	10
Loffland Bros	203	dsl	1140	MC U15	1000	10
Rainbow Drlg	4	dsl	1600	Cbot 1200	1200	15
Rosamond Drlg	11	dsl	1425	OIME SL5	1425	15
	12	dsl	850	S/B N46	850	10
Spartan Drlg	34			S-H 7000		9
	4E	d-e	600	Sup 700E	700	10
Wheless Drlg	2	dsl	1200	Emsco D2	1200	11
Woolf & Magee	2	dsl	1550	G-D 700	1000	13.5
SABINE						
Challenger Drlg	47	dsl	700	G-D 500	600	8
SAN PATRICIO						
J & C Drlg	9	dsl	1050	Wils 600	630	9
SAN SABA						
Tucker Drlg	8	dsl	550	Idco H40	550	9
SCHLEICHER						
D B Drlg	22	dsl	750	Unit U34	450	7
Delta Drlg	70	dsl	300	S-H 6000	350	7
Mellon Drlg	3	dsl	750	Beth S50	375	6.2
Wes-Tex Drlg	6	dsl	650	Beth S60	700	10
SCURRY						
Bandera Drlg	4	dsl	925	BDW 450T	540	8.5
D B Drlg	2	dsl	910	Nat T32	450	8.5
	24	dsl	800	Beth S45E	575	8.5
Grace TRG Drlg	418	dsl	800	Coop 750	500	7
Riley Drlg	2	dsl	300	Nat	300	4.5
Wes-Tex Drlg	21	dsl	350	MC U34	450	7
SHACKELFORD						
Jones Drlg Co	53	dsl	225	Houston Portable	225	3
Sojourner Drlg	5	dsl	250	MC U15	550	7
SHELBY						
Gibson Drlg	4	dsl	506	Wils Mogul 65	398	5
	5	dsl	1030	Wils 75P	700	9
SMITH						
Delta Drlg	22	dsl	1800	Emsco D3 Type III	1560	14
	40	dsl	1500	Emsco D2 Type III	784	11
	74	dsl	1000	S-H 7000	480	9
FWA Drlg	33	dsl	1750	G-D 700M	1040	12
	35	dsl	750	Nat 370	800	9
Globe Drlg	5	dsl	850	Oilwl 76	1000	14
	7	dsl	3000	G-D 1100	1500	20
	8	d-e	3000	G-D GD1000	1500	20
Hinton Drlg, W B	3	dsl	1700	Nat 80B	1650	15
Kelley Onshore Drlg	10	d-e	1700	Oilwl 750	750	12
Maxwell Herring Drlg	2	dsl	2400	Beth M810	2400	14.4
	12	dsl	1500	Wils 150A	2500	15
	18	dsl	2700	G-D 1100	2700	20
	20	dsl	1220	S/B 75A	1220	14
Noble Drlg	N-58	dsl	800	Nat 55	800	12
	N-812	dsl	1420	Nat 80B	1420	15
Penrod Drlg	18	dsl	2250	Nat 1625M6	2200	10
Spartan Drlg	31			MC U34		7.5
Verna Corp	21	dsl	550	MC	600	10
	22	dsl	550	MC U15	600	10
	23	dsl	550	MC U15	600	10
	24	dsl	550	MC U15	600	10
	25	dsl	1000	MC U15	600	10
	27	dsl	1000	MC U15	600	10
	29	dsl	1000	MC U15	600	10
	30	dsl	550	MC U15	600	10
	32	dsl	1212	Verna U15	500	11
	35	dsl	1000	Idco 711SJ	1200	14
	37	dsl	1212	MC U15	550	11
STARR						
Bawden Int'l	7	dsl	1200	Nat 55	700	11.5
Harkins & Co	2	dsl	1500	S/B N95	1500	14
San Patricio Corp	5	dsl	1000	Shaf 800	600	9
Wilson Bros Drlg	15	dsl	2600	Nat 110	2700	20
STEPHENS						
Bandera Drlg	9	dsl	700	MAC 300	475	7.5
Bearden Drlg	11					
E & H Drlg	1	dsl	700	MC U15	700	7.5
	6	dsl	600	Wils Mogul	350	6.5
Wes-Mor Drlg	2	dsl		MC U34		6
	6	g-b		MC U34		4.5
	11	dsl		Wils Roadair		6
STERLING						
Hondo Drlg	1	dsl	700	MC U15	700	15
Tucker Drlg	2	dsl	750	Emsco GB500	750	10
	12	dsl	750	Nat 50A	750	10
Wes-Tex Drlg	1	dsl	650	Nat 50A	650	10
	3	dsl	700	Nat 50A	700	10
	11	dsl	450	Beth S55	700	10
STONEWALL						
Bandera Drlg	2	dsl	470	MC U34	380	6.5
Texzona Drlg	1	dsl	475	MC U34B	450	6.5
SUTTON						
TMBR Drlg	11	gas	500	MC U15	500	10
Wes-Tex Drlg	8	dsl	335		500	8
TAYLOR						
Bandera Drlg	5	dsl	650	MAC 300	475	7.5
Lynx Drlg	2	dsl	500	Idco H30	380	7
	4	dsl	750	TSM-6000	540	9
TERRELL						
Parker Drlg	89	gas	1600	Nat 1320	1600	23
TERRY						
GCO Drlg	3	dsl	820	BDW 650M	650	12
Helmerich & Payne	95	d-e	1600	Nat 80UE	800	15
Norton Drlg	2	dsl	450	Wils Mogul 42	650	7
	8	dsl	550	Wils 75	900	14
	12	dsl	550	Wils 75	900	11.5
Sharp Drlg	65	dsl	1580	Emsco D3	1836	18
Sitton Drlg	6	dsl	650	Wils 75P	900	10
THROCKMORTON						
Bandera Drlg	10	dsl	775	MAC 300	475	7.5
Megargel Drlg	6	dsl	350	Beth S45B	275	6
Morrison Drlg & Prod	103	dsl	925	Idco H35	550	7.5
TITUS						
Cape Drlg	2	dsl	1000	S/B TR7W	600	8.5
Gibson Drlg	6	dsl	506	Wils Mogul 42	318	5
Thunderbolt Drlg	20	dsl	1150	Wils Mogul	478	8

TEXAS (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
TOM GREEN						
McBay Oil & Gas	1	dsl	3406	Wils Super 38	3306	5
	2	dsl	3406	Beth S50	3408	8
Mallon Drlg	4	dsl	750	Beth S50	375	7
Tucker Drlg	3	dsl	350	S/B N45	600	6.5
	10	dsl	750	S/B N45	750	7.5
TYLER						
Blocker Drlg	6	dsl	1500	Cbot HT Expl	950	10
Cliffs Drlg	41	dsl	2600	Nat 1320	2475	25
UPSHUR						
Atco Drlg Southern	55	d-e	2000	Nat 80UE	1000	15
Lester Drlg, Dan	10	dsl	1800	Olwl 860	2400	20
Thunderbolt Drlg	52	dsl	2000	Nat 110M	1845	18
UPTON						
Ard Drlg	1	dsl	600	S-H	670	8.5
Big Chief Drlg	24	gas	1200	MC U15	900	11
Dual Drlg	14	dsl	1560	Olwl 760	1000	15
	31	dsl	1600	Olwl 500	600	9
Transcontinental Drlg-San Angelo	96	dsl	1000	MC U36A	850	12
TMBR Drlg	5	dsl	700	Nat 50CA	600	10.5
	19	dsl	700	Nat CA50	700	10
VAL VERDE						
Rowan Drlg-US	12	dsl	2000	Nat 1320M	2100	18
VAN ZANDT						
Delta Drlg	21	dsl	2300	G-D 1100	2592	17
Hinton Drlg, W B	8	dsl	1300	S-H 7000	400	10
	9	d-e	2600	Nat 110UE	3000	20
Noble Drlg	N-85	dsl	1830	Nat 80B	1830	15
Schlenaker Drlg	5	dsl	950	MC U15	950	10
VICTORIA						
B D K Drlg	4	dsl	1095	S/B N7	870	11.5
	6	dsl	1000	S/B 4610	950	10
	8	dsl	1000	S/B 4610	750	10
Corpus Christi Drlg	6	dsl	300	S/B 550	450	6
Delta Drlg	87	d-e	2000	Emsco D3 Type II	2592	16
	94	d-e	2000	Emsco D3 Type II	2592	16
FWA Drlg	18	dsl	1150	Wils Giant	380	7.5
	29	dsl	2600	Nat 110	2400	20
Houtech Energy	803	dsl	1600	G-D 700	1200	15
Kelley Onshore Drlg	KK-3	d-e	2000	OIME SD7	1500	18
Padre Drlg	2	dsl	500	S/B H4210	400	7.5
Sonat Southland Drlg	1	dsl	1100	Emsco GB500		10
	5	dsl	1400	S/B N55		10
	8	dsl	1400	Emsco GB350		8.5
	10	dsl	1850	Beth M810		16
	11	dsl	3000	Emsco A1500		24
	12	dsl	3000	Emsco 1500A		18
	14	dsl	3000	Emsco A1500		18
	16	dsl	3000	S/B N12A		18
WALKER						
Henley Drlg	7	dsl	4000	Emsco C2	2000	25
Lanex Drlg	B-18	d-e	2700	G-D 1100E	1500	20
WALLER						
Bawden Int'l	3	d-e	2100	Nat 110E	1500	16
	4	d-e	2000	Nat 80UE	1000	14
	5	mch	2000	Nat 110M	1500	18
	15	d-e	1600	Nat 610E	750	12
	26	mch	1550	Olwl 76	700	13
	30	d-m	1850	Emsco D3 Type III	1000	15
WARD						
Cactus Drlg	22	dsl	1450	Nat100	1650	15
	59	dsl	550	S/B N4	454	6
	68	dsl	500	Idco H30	454	6
Delta Drlg	86	dsl	500	S-H 7000	480	9
Grace TRG Drlg	403	dsl	800	Coop 750	800	9
	467	dsl	800	Coop 750	800	9
Loffland Bros	117	d-e	3300	MC U1220EBD	3300	25
Nowotny & Conley Drlg	4	dsl	1600	Nat 610	1000	12.5
Parker Drlg	58	dsl	1650	Nat 100M	1650	16
Resource Drlg	RD3	dsl	3105	Nat 1320	3740	25
Sharp Drlg	370	d-e	1488	MC U712EC	1995	18
WASHINGTON						
Haning & Young Drlg	101	d-m	1600	Nat 610	750	12.5
Resource Drlg	RD-31	dsl	1560	Nat 80B	1835	14
WEBB						
Alanco Drlg	3	dsl	1425	Idco H1000	975	11
Cliffs Drlg	40	d-e	2600	Nat 1320UE	3025	25
Dixon Drlg	12	dsl	900	S/B N4	450	6
FWA Drlg	25	dsl	2000	Wils 120	1580	16
Harkins & Co	1	dsl	1800	Emsco C Type III	1800	18/5''
J 3 Drlg	1	dsl	1375	MC U36A	950	14
Magee-Poole Drlg	6	dsl	1500	Cbot 900	950	11/4''
Moran Bros	67	dsl	1700	Emsco D3	1000	15
Nicor Drlg	56	d-e	2700	MC U1220EB	2000	25
Penrod Drlg	16	dsl	3075	S/B N12A	1840	20
	25	dsl	2600	Emsco C2	1950	25
	101	dsl	1684	S/B N46	1080	10
	125	dsl	1000	Nat 80B	1760	15
	128	dsl	1000	Nat 80B	1760	15
	131	dsl	1000	Nat 80B	1760	
	135	dsl	2000	Nat 80B	1000	15
	136	dsl	1000	Nat 80 B	1000	15
Rio Grande Drlg	7	dsl	750	OIME SL5	1500	12
South Texas Drlg	6	dsl	650	S/B N46	800	10
	7	dsl	910	Idco H1200	1200	15
Williams Drlg of South TX	2	dsl	1280	Cbot 900	900	10.5/4''
	4	dsl	800	Idco BIR8085	950	11.5/4''
Willis Drlg	6	dsl	1000	Idco H1700	2400	20
WHARTON						
B D K Drlg	10	dsl	1000	S/B N46	900	10
Big 6 Drlg	2	dsl	800	Cbot	600	10
Delta Drlg	101	d-e	2600	Emsco C1 Type II	2730	20
FWA Drlg	18	dsl	1350	Wils Mogul 42	730	9
Padre Drlg	7	dsl	700	S/B H14610	750	10
	10	dsl	1300	S/B 4610	450	8.5
WHEELER						
Baker & Taylor Drlg	3	dsl	1200	MC U20	1200	18
Helmerich & Payne	47	dsl	2475	Olwl M2000	2730	26
Loffland Bros	222	d-e	3300	MC U1220B	2200	28
Noble Drlg	OW-22	e-e	3300	Olwl E2000	3300	25
ONEOK Drlg	10	dsl	3000	Nat 110M	1800	20
Parker Drlg	182	dsl	2200	OIME SL1500P	2200	22
Quarles Drlg	10	dsl	2700	MC U914C	2400	22
Trigg Drlg	7	dsl	1200	S/B N95	1800	20
Viersen & Cochran Drlg	16	d-e	2400	Nat 1320	3300	23
WICHITA						
Moran Drlg, E W	7	dsl	1600	G-D 700	800	13
WILLACY						
Alanco Drlg	1	dsl	800	Idco H40	500	8.5
	2	dsl	1000	Idco H40	600	10
Magee-Poole Drlg	12	dsl	1500	Cbot 900	950	11/4''
Nicklos Drlg	76	d-e	2600	Nat 1320UE	1800	25
WILSON						
South Texas Drlg	8	dsl	600	S/B N46	550	8
WINKLER						
Butler-Johnson	11	d-e	2000	Nat 110UE	2000	20
Kenai Drlg	14	dsl	700	Emsco GC500	700	11.5
Penrod Drlg	111	dsl	1950	Nat 1625M	3000	30
Sharp Drlg	56	dsl	2321	G-D 2100	2742	30
WISE						
M N D Drlg-Northern	51	dsl	760	Nat 50	760	7
	52	dsl	760	Nat 50	760	7
	53	dsl	1040	MC U15	760	9
	54	dsl	1040	MC U15	760	9
	56	dsl	1040	MC U15	760	9
	59	dsl	1040	Emsco G350	760	9
	60	dsl	1040	MC U15	760	10
	61	dsl	1400	MC U36A	760	11
	62	dsl	1040	MC U15	760	10
	63	dsl	1040	MC U15	760	10
	64	dsl	1040	MC U15	760	10
	65	dsl	1400	MC U36A	760	12
	56	dsl	1400	MC U36A	760	12
Moran Drlg, E W	6	dsl	900	Beth S55	400	10
Wes-Mor Drlg	10	dsl		MC U15		7.5
WOOD						
Gibson Drlg	3	dsl	529	Wils 65	380	5
Goldrus Drlg	3	d-e	1700	Olwl E2000	3400	20
Grace France Drlg	6	dsl	1300	Nat 610	900	13
Helmerich & Payne	40	dsl	1650	Olwl 860	1815	20
Henley Drlg	220	dsl	1200	Cbot 900	1000	10
Justiss Oil	28	dsl	700	Olwl 96	1000	15
	33	dsl	1000	Olwl 96	1400	17
Maxwell Herring Drlg	17	dsl	2400	Beth 1500	2400	20
Schlenaker Drlg	7	dsl	800	Unit U15	950	9.5
Spartan Drlg	33			S/B RR800		9
Thunderbolt Drlg	50	dsl	1750	Cbot 1200	1300	13.5
WOODWARD						
Unit Drlg & Expl	3	dsl	700	Nat 50A	900	11
YOAKUM						
Cactus Drlg	71	dsl	900	Emsco U36A	916	10
D B Drlg	3	dsl	585	S/B N4	450	8
Dual Drlg	26	dsl	2550	Wils 150A	1650	18
Grace TRG Drlg	303	dsl	1000	Wils 75	900	12
Hondo Drlg	10	dsl	1200	S/B N75A	1200	15
Norton Drlg	5	dsl	550	Wils 75	850	10.5
Sitton Drlg	4	dsl	650	Wils 75P	900	10
Verna Corp	2	dsl	600	S/B N55	800	12.5
YOUNG						
Burns Drlg	8	dsl	444	MC U34B	350	7.5
E & H Drlg	2	dsl	400	MC U34	325	6
	4	g-l	550	MC U15	550	7.5
Grand Drlg	1	dsl	800	Shef SS800S	475	8
Wes-Mor Drlg	7	dsl	680	MC U34	680	7.5
ZAPATA						
Atco Drlg Southern	11	dsl	1600	Nat 55	550	12
	57	d-e	1600	Nat 610UE	800	12
Dixilyn-Field Drlg	14	d-e	2200	Olwl 840E	2000	18
Grace TRG Drlg	75	d-e	2200	Nat 1320UE	2400	22
Harkins & Co	6	dsl	1260	S/B N75A	1260	12.5
	8	dsl	1800	Emsco C1 Type III	1800	18/5''
Penrod Drlg	22	dsl	2800	Nat 1320N	1950	25
	119	dsl	1600	Nat 1625M	3000	30
	126	dsl	1000	Nat 80B	1760	15
PRC Drlg	5	dsl	1817	G-D 700M	1040	14
	7	dsl	2485	G-D 800M	1040	16
Texas Drlg	5	dsl	2000	Cbot 2550	1200	14
	10	dsl	2000	Cbot 2550	1200	14

UTAH

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Noble Drlg	OW-862	dsl	2400	Olwl 860	2400	18
TWT Expl	51	dsl				5.5
	55	dsl				8
	56	dsl				12
	57	dsl				17
	58	dsl				14
	59	dsl				12
W E S Corp	7		1000	Wils Giant	1000	12
	51	dsl				5
	58	dsl				14
	59	dsl				12
CACHE						
Manning, R L	7	g-b	750	Emsco G500	750	8.5
CARBON						
Loffland Bros	1	dsl	1290	MC U40	1440	13
Viersen & Cochran Drlg	7	dsl	2000	Unit U712	1400	16
DUCHESNE						
Lord Drlg	3	dsl	2200	Olwl M860	1650	18
Manning, R L	10	dsl	720	Olwl 660	720	10
Montgomery Drlg	31	dsl	2000	Nat 110UE	2700	18
	32	d-e	2700	Nat 110UE	2000	18
	43	e-e	2000	Nat 110UE	2000	20
	44	dsl	2000	Olwl 96	1000	20
	48	dsl	2000	Nat 110	2000	20
Nicor Drlg	60	dsl	1350	Nat 55M	700	15
	66	dsl	2000	MC U712A	1200	16
Parker Drlg	117	gas	2000	Nat 110	2000	22
	177	dsl	1650	OIME SL1500	1650	16.5
Westburne Drlg	58	dsl	620	Nat T32	310	7
EMERY						
Veco Drlg	2	dsl	425	May 5000	500	7
GARFIELD						
Loffland Bros	58	d-e	1600	Nat 80B	2000	15

UTAH (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
IRON						
Grace Bomac Drlg	93	d-e	3645	Nat 1320UE	2000	25
SAN JUAN						
Arapahoe Drlg	2	g-b	300	Nat T32	320	8
	10	g-b	700	Nat 50A	500	12
Bayless Drlg	1	dsl	1500	Idco H1000	950	10
Coleman Drlg	2	dsl	555	Idco H40D	700	8
	3	dsl	555	Idco H44	700	8
	4	dsl	850	S/B MODN46	900	12
Energy Drlg	1	dsl	400	Beth S45A	500	9
	2	dsl	535	Idco H35S	540	9.5
Energy Search Drlg	1	dsl	1500	Cbot 900	900	10
	2	dsl	1500	Cbot 900	900	10
Loffland Bros	29	d-e	1400	MC U36A	1600	11
Parker Drlg	116	d-e	1650	Nat 80B	1650	20
True Drlg	4	dsl	450	Emsco GA250T	500	6.5
Young Drlg	3	dsl	400	Wils 75	600	8.5
	5	dsl	750	Crdw K500	600	8
SEVIER						
Grace Bomac Drlg	56	dsl	2250	G-D 1100M	2250	20
SUMMIT						
Dixilyn-Field Drlg	39	d-e	3720	Nat 110UE	2000	18
Exeter Drlg Northern	56	dsl		G-D 1100	1650	20
Forwest	6	d-s	2600	Nat 110UE	2000	20
Grace Bomac Drlg	90	d-e	2730	Nat 110UE	2730	20
Loffland Bros	8	dsl	2100	MC U914C	2400	20
	60	d-e	1800	MC U712A	2000	17
	186	dsl	2100	MC U914C	2400	20
	325	dsl	2160	G-D 2100	2400	25
Manning, R L	33	d-e	1850	Emsco C1	1500	20/5"
Norton Drlg	9	d-e	1350	G-D 110E	1500	20
Parker Drlg	171	dsl	1650	OIME 1500P	1650	20
Viersen & Cochran Drlg	11	dsl	2600	Nat 110	2400	20
UINTAH						
All Western Drlg	2	gas	800	MC U15	700	10
	3	dsl	1050	MC U15	840	10
Anderson-Myers Drlg	14	dsl	1800	S/B N75A	1800	14
Apollo Drlg (CO)	2	dsl	1700	Nat 80B	1800	16
Apollo Drlg (CO)	4	dsl	2000	Nat 80B	1800	16
Bawden Drlg Ltd	21E	d-s	2000	Emsco C1		20
Brinkerhoff-Signal	79	dsl	550	Nat 370	800	8.5
	85	dsl	550	Nat 370	800	9
	86	dsl	1000	Nat 80B	1500	16
Loffland Bros	236	dsl	1280	MC U15	1000	10
Manning, R L	23	dsl	800	S/B N45	740	7.5
Nicor Drlg	43	d-e	1500	G-D 500E	650	11
	46	d-e	2000	Emsco C1E	1500	21
Olsen Drlg	2	dsl	1250	Scat 750	824	10
	5	dsl	6015	Crdw L350	500	7.5
Veco Drlg	9	dsl	1200	Idco 725	750	11
Viersen & Cochran Drlg	13	dsl	2000	Nat 80B	1600	17
UTAH						
Dixilyn-Field Drlg	33	d-e	1960	Olwl 940E	2000	20
Loffland Bros	221	dsl	2880	MC U1220AE	3200	25
WAYNE						
Rio Grande Drlg	27	dsl	750	S/B N75	1030	14.5

VIRGINIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Ray Resources	7	dsl	450	Crdw KB500	700	8
WISE						
Ray Resources	4	dsl	450	Idco BIR5525	600	6
	9	dsl	450	Idco H35	600	6.5

WASHINGTON

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
BENTON						
Brinkerhoff-Signal	70	dsl	550	Crdw KW250	450	6.5
GRAYSHARBOUR						
Bawden Drlg Ltd	14E	scr	1300	Nat 1320UE	2000	22
LEWIS						
Taylor Drlg	4	dsl	1000	Nat 50	750	9

WEST VIRGINIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Ray Resources	3	dsl	450	Idco BIR5525	600	6
	8	dsl	450	S/B N55	600	10
Union Drlg	9	dsl	1200	Cbot Exp III	425	9
BOONE						
Hurt & Assoc, Clint	5	dsl	350	Wils Super 38	350	5
Smith Drlg	8	dsl	300	Lee	360	4.5
CALHOUN						
Hurt & Assoc, Clint	7	dsl	350	Kremco K600	500	7.5
FAYETTE						
Smith Drlg	6	dsl	1025	S/B N45M	650	10
	10	dsl	300	Chel M320	425	5
HARRISON						
Union Drlg	5	dsl	1200	Crdw 350	385	6
JACKSON						
Hurt & Assoc, Clint	2	dsl	350	Wils Super 38	350	5
	4	dsl	350	Wils Super 38	350	5
	6	dsl	350	Wils Mogul 42	500	7
Smith Petr, Carl E	4	dsl	350	Emsco GB250T	500	10
	5	dsl	238	Wich	320	4.2
KANAWHA						
FWA Drlg	13	dsl	275	Wils Giant	300	4.5
	22	dsl	275	Wils Super 38	300	4.5
LOGAN						
FWA Drlg	15	dsl	275	Wils Super 38	300	4.5
MASON						
Union Drlg	11	dsl	1200	S-H 5000	350	5
RITCHIE						
Hurt & Assoc, Clint	1	dsl	350	Wils Mogul 42	500	7.5
ROANE						
FWA Drlg	23	dsl	275	Wils Super 38	300	6
Hurt & Assoc, Clint	8	dsl	350	Kremco K600	500	7.5
TYLER						
Ray Resources	14	dsl		Nat T20	600	6.5
UPSHUR						
Union Drlg	1	dsl	1200	Crdw KM250	425	6
	2	dsl	1200	Idco BIR5525	425	6
	6	dsl	1200	S/B DH4210	425	8
	15	dsl	1200	Idco BIR5525	425	6
WIRT						
Hurt & Assoc, Clint	3	dsl	350	Wils Super 38	350	5
Smith Petr, Carl E	6	dsl	320	Idco BIR5525	475	8.5

WYOMING

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
UNDESIGNATED						
Pruet-Ram-Co	4	dsl	2000	Emsco D3	2000	18
Westburne Drlg	66	dsl	3000	G-D 1100E	3000	20
	72	dsl	620	Nat T32	310	7.5
ALBANY						
Simmons Drlg	38			Troy 600	600	9.5
BIG HORN						
Anderson-Myers Drlg	10	dsl	670	Nat T32	800	8.5
Barnhart Drlg	2	dsl	600	Nat T20	350	5
	3	dsl	600	Idco H35	350	6
Simmons Drlg	36	dsl	350	Hycalog HH600P	350	6.8
CAMPBELL						
Apollo Drlg (CO)	1	dsl	1100	Nat 55	1200	12
	3	dsl	1200	Nat 55	1200	12
	6	dsl	1200	Olwl 76	1000	12
	8	dsl	1200	Olwl 76	1200	12
	23	dsl	750	Nat 50A	770	95
Brinkerhoff-Signal	12	dsl	1000	Nat 55	1000	12
	20	dsl	500	Nat 50A	500	10
	76	dsl	800	G-D M500	800	10
Burris Drlg	116	dsl	1200	Sup 700	650	10
	117	dsl	800	MAC 400	500	10.5
Cyclone Drlg	2	dsl	800	Beth M58	800	12
	4	dsl	800	MC U15	800	9
	5	dsl	800	Beth M58	800	12
	6	dsl	800	Nat 50A	860	10

WYOMING (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
CAMPBELL (Cont'd)						
Enopco	3	dsl	2000	Nat 80B	1800	17.5
Exeter Drlg Northern	3	dsl	550	Nat 50A	750	9.5
	7	dsl	700	S/B N75	1000	12.5
	8	dsl	500	S/B N7	750	9.5
	9	dsl	750	S/B N75	1100	12.5
	10	dsl	500	S/B N55	750	10.5
	20	dsl	500	Emsco GC500	750	11
	30	dsl	750	Emsco D2	1100	12.5
	36	dsl	450	Beth M58	750	11
	37	dsl	500	G-D 700	1100	12.5
	38	dsl	500	MC U15	750	9.5
Gallagher Drlg	6	dsl	520	Crdw O	970	12
Grace Bomac Drlg	43	dsl	1000	G-D 700M	1000	12.5
	53	dsl	1500	Nat 80B	1500	16
Harpel Drlg	4	dsl	1200	S/B N46	800	12
Nicor Drlg	57	dsl	1060	Nat T45	550	10.6
	59	dsl	1400	Nat 55M	700	14.5
	62	dsl	1000	Nat 610	750	12.5
Shelby Drlg	51-E	d-e	1000	Idco 725ESCR	75	110
Tower Drlg	5	dsl	600	G-D 500M	800	11.5
True Drlg	17	dsl	1350	Nat 50A	1000	12
CARBON						
Anderson-Myers Drlg	18	dsl	600	Nat T45	800	10
Atco Drlg	54	d-e	1800	Nat 610UE	1800	12
Exeter Drlg Northern	28	dsl	1200	G-D 800	1275	15
	41	dsl	1000	G-D 700	1100	12.5
Harpel Drlg	6	dsl	1300	Emsco D2	1300	14
Manning, R L	22	dsl	1180	Emsco A550	1180	11
CONGRESS						
Westburne Drlg	6U	dsl	750	Nat 50A	850	9.5
CONVERSE						
Anderson-Myers Drlg	5	dsl	1000	Emsco GB500	820	10
Apollo Drlg (CO)	24	d-e	2000	Emsco D3	2400	16
Apollo Drlg Inc (TX)	2	dsl	1500	Nat 80B	1500	16
Brinkerhoff-Signal	5	dsl	1500	Nat 80	1500	15
Burris Drlg	106	dsl	1200	G-D 500	650	11
	108	dsl	1200	G-D 500	650	11
Cyclone Drlg	3	dsl	1250	MC U30	1250	15
Exeter Drlg Northern	17	dsl	500	Nat 50A	750	9.5
	18	dsl	500	Nat 50A	750	9.5
	21	dsl	550	MC U15	720	9.5
Grace Bomac Drlg	45	dsl	1500	G-D 800M	1500	16
	91	dsl	1500	Nat 80B	1500	16
Loffland Bros	234	dsl	1400	MC U40	1600	13
Manning, R L	6	dsl	1290	Emsco GB800	1290	14
Westburne Drlg	65	dsl	870	Nat T45	400	9
CROOK						
Brinkerhoff-Signal	2	dsl	875	MC U36A	600	9
Burris Drlg	119	dsl	450	MAC 400	500	10.5
Cyclone Drlg	1	dsl	800	MC U15	800	9
Exeter Drlg Northern	34	dsl	500	MC U15	750	9.5
	35	dsl	500	MC U15	750	9.5
	39	dsl	500	MC U15	750	9.5
FREMONT						
Anderson-Myers Drlg	15	dsl	1800	S/B N75A	1350	14
Atco Drlg	2	dsl	2000	Nat 80B	1800	16
	12	dsl	1800	Nat 80B	1800	16
Challenger Drlg	25	dsl	300	Nat T20	600	5
Dixilyn-Field Drlg	34	d-e	3720	Nat 1320UE	2000	25
Elenburg Expl	12					
Forwest	2	d-s	2600	Idco E2100	1800	22
Grace Bomac Drlg	24	dsl	2250	Nat 110M	2250	20
Helmerich & Payne	81	d-s	2200	Nat 110UE	1500	20
Loffland Bros	223	dsl	1280	MC U15	1000	10
Manning, R L	25	dsl	1000	S/B N75	1300	11.5
Nicor Drlg	70	d-e	2700	G-D 1500E	2000	25
Quarles Drlg	24	dsl	2700	G-D 1500E	2000	30
	25	d-e	4000	Emsco C3	3000	30
Trigg Drlg	6	d-e	2400	MC U814E	2400	25
Westburne Drlg	69	dsl	1400	Nat 1320M	1600	20
HOT SPRINGS						
Manning, R L	17	g-b	770	Emsco GC500	810	11
	28	g-b	800	Emsco GB350	506	7.5
JOHNSON						
Brinkerhoff-Signal	14	dsl	1000	Nat 55	1000	12.5
	52	dsl	1500	G-D 700M	800	12.5
Burris Drlg	101	dsl	1500	G-D 1100M	1500	20
	112	dsl	1500	G-D 1100	1500	20
Grace Bomac Drlg	59	dsl	1500	Nat 80B	1500	16
Loffland Bros	163	dsl	1280	Nat 80B	1500	16
Manning, R L	34	d-e	1600	Emsco D3	1000	18
Nicor Drlg	61	dsl	1550	Nat 610	750	12

WYOMING (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
LINCOLN						
Apollo Drlg (CO)	16	del	1300	Nat 80B	1200	14
Atco Drlg	9	d-e	2500	Nat 110UE	2500	20
Brinkerhoff-Signal	7	del	1500	Nat 80B	1500	15
	72	del	2000	Nat 1320UE	2000	25
Burris Drlg	111	del	1500	G-D 1100	1500	20
Exeter Drlg Northern	24	del	1000	G-D 800	1100	15
Loffland Bros	89	d-e	2100	MC U1220EB	2400	25
	97	d-e	3300	MC U1220EB	3300	30
	19	d-e	4000	Emsco CE3000 Type II	3300	35
	184	del	2160	MC U712A	2400	15
Manning, R L	30	d-e	1600	Emsco D3	1000	18
Norton Drlg	10	del	750	G-D 700	1070	15
True Drlg	14	del	1200	Nat 50A	1200	12
	24	del	1400	MC U914C	2400	22
NATRONA						
Atco Drlg	8	del	1230	Emsco A550	1230	12
	20	del	800	Emsco GB500	800	10
	56	d-e	1800	Nat 80UE	1800	16
Burris Drlg	114	del	1500	G-D 1100	1500	20
Challenger Drlg	27	del	300	Nat T12	500	4.5
Dixilyn-Field Drlg	31	d-e	5580	Nat 1320UE	2000	25
	32	del	2300	Nat 130	2331	25
Elenburg Expl	2	del	320	W-N CC2000	230	2.5
Manning, R L	12	del	700	Oiwl 66	550	11
Parker Drlg	118	del	1650	Nat 100M	1650	20
	193	del	3200	OIME 3000E	3000	35
Rio Grande Drlg	26	del	750	S/B N75	1030	14.5
Sabre Drlg	2	del	671	Wils Mogul 42	671	5
Shelby Drlg	11	del		Idco 35ESCR		10
Simmons Drlg	48	del	350	Hycalog HH6000	350	6.8
NIOBRARA						
Harpel Drlg	5	del	1000	S/B N42	65	9
PARK						
Barnhart Drlg	1	del	700	Idco H525	575	8.5
Manning, R L	8	del	850	Emsco GA500	850	9
	15	del	700	Nat 55	700	11
	16	g-b	640	Nat T32	458	6.5
	26	g-b	1155	Emsco GB800	1365	14
Penrod Drlg	115	del	1600	Nat 1625ME	3000	30
PARK (Cont'd)						
Wyoming Well Serv	21	del	500	Idco H35	318	5
	24	del	300	Crdw 200A	318	4.5
	30	del	300	Crdw 200A	318	4.5
PLATTE						
True Drlg	19	del	1000	Nat 50A	1000	12
ROUTT						
Anderson-Myers Drlg	1	del	680	Nat T32	450	7
SHERIDAN						
True Drlg	15	g-lp	1300	Nat 50A	1000	11.5
SUBLETTE						
Dixilyn-Field Drlg	36	del	2000	Nat 110UEV	2000	18
	38	d-e	3720	Nat 110UE	2000	18
	41	d-e	3720	Nat 1320UE	2000	25
Manning, R L	29	del	800	Emsco GB500	934	9
Montgomery Drlg	5	d-e	2700	Nat 1320UE	3645	25
Norton Drlg	6	del	750	Wils 75	900	13
Parker Drlg	124	del	1650	Oiwl 2000E	1650	25
	183	del	1650	OIME 1500P	1650	20
Rio Grande Drlg	3	del	1300	Nat 1320M	2300	25
	6	d-e	1350	G-D 1500E	1195	25
	10	d-e	1300	Nat 1320UE	1195	25
Simmons Drlg	35			Idco 525	600	9
True Drlg	9	del	1200	MC U40	1200	15
	16	g-lp	1300	Nat 50A	1000	11
	25	del	2100	MC U914C	2100	22
Viersen & Cochran Drlg	9	del	2000	Nat 110	2400	20
SWEETWATER						
Brinkerhoff-Signal	57	del	1560	Nat N80B	1560	16
	69	del	1000	Nat 110	1500	18
Dixilyn-Field Drlg	40	d-e	1860	Nat 80UE	1000	15
Exeter Drlg Northern	11	del	700	G-D 700	1000	12.5
Grace Bomac Drlg	44	del	1500	G-D 800	1500	16
Loffland Bros	40	del	1680	S/B N95	2000	16
Manning, R L	24	del	860	S/B N75	980	11
Parker Drlg	163	del	1650	OIME SL1500	1650	20
SWEETWATER (Cont'd)						
Penrod Drlg	23	del	2800	Nat	1950	25
Rio Grande Drlg	28	del	1000	S/B N95	2300	18
Shelby Drlg	12	d-e	1600	G-D 1100ESCR	2000	20
TETON						
Exeter Drlg Northern	31	del	1000	G-D 800	1650	15
	43	del	2250	Emsco C Type III	2250	20
Loffland Bros	30	d-e	2160	MC 914EC	2200	20
UINTA						
Anderson-Myers Drlg	12	del	1500	OIME 1500	1500	17
Brinkerhoff-Signal	6	del	1500	G-D 1100	1500	18
	40	del	2400	Nat 130UE	3000	25
	73	del	1500	Nat 80B	1500	15
	88	del	4000	Nat 110UE	2000	20
Exeter Drlg Northern	29	del	1200	G-D 800	1125	15
Forwest	1	d-e	2600	Idco E2100	1800	22
Grace Bomac Drlg	29	del	2250	Nat 110M	2250	20
Loffland Bros	108	del	2160	S/B N12A	2400	25
	214	del	1860	MC U40	1600	13
Lord Drlg	1	del	2200	Oiwl M830	1650	18
	2	del	2200	Oiwl M860	1650	18
Manning, R L	21	del	1095	Nat 80B	1365	15
	31	d-e	1350	Emsco D2	700	11
	32	d-e	1600	Emsco D3	1000	18
	35	d-e	2400	Emsco C1	1500	20/5"
Noble Drlg	N-116	e-s	3000	Nat 110UE	3000	20
	132	d-s	3300	Nat 1320UE	3300	25
Parker Drlg	169	del	1650	OIME SL1000P	1650	20
	173	del	1650	OIME 1500P	1650	20
Rio Grande Drlg	5	del	1300	Nat 110	2400	20
Viersen & Cochran Drlg	8	del	2000	Nat 80B	1500	16
	14	del	2600	Emsco 800A	1500	17.5
WASHAKIE						
Anderson-Myers Drlg	2	del	1200	Nat 55	1200	12
	9	del	1200	Nat 55	1200	12
Burris Drlg	105	del	1200	Unit 36A	650	12
Exeter Drlg Northern	19	del	700	G-D 800	1100	14
Manning, R L	9	del	650	Emsco GA500	650	8.5
WESTON						
Harpel Drlg	3	del	1200	Idco H725	800	11

International Contract Rotary Land Drilling Rigs

AFRICA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
ALGERIA						
Saipem	5894	d-e	3200	Nat 110UE	1600	17
	5895	d-e	3200	Nat 110UE	1600	17
CHAD						
Parker Drlg	194-HH/41	del	2000	OIME TBA2000	2000	20
EGYPT						
Challenger Ltd	18	del	900	Cbot 100	1000	12
Egyptian Drlg	1					
	2					
	4			Nat 110		
	7					
Forex Neptune and/or Affil	7	del	3200	Nat 110	1600	19
Geoproeco Intl	41	del	2200	Idco H900	1100	10
Saipem	5863	d-e	3200	Nat 110UE	1500	17
Santa Fe Drlg	64	del	1800	Nat 110	1800	16
	69	d-e	2000	Nat 1320DE	3400	20
	73	del	2000	Nat 110	1800	16
	75	del	2000	Nat 1320M	1600	20
EGYPT (Cont'd)						
Santa Fe Drlg	92	d-e	2800	Nat 1320UE	1400	20
	94	d-e	2250	Nat 110UE	2000	16
	97	d-e	2800	Oiwl E2000	2000	20
	102	d-e	2400	Nat 110UE	1500	16
	143					
GABON						
Deutsche Tiefbohr	T-9					
Forasol	110/5	d-e	2600	Nat 110	2000	16
	110/11	d-e	2600	Nat 110	1500	16
Forex Neptune and/or Affil	4	del	1300	Idco H525	500	9
	27	del	2600	Idco Super 711	1200	18
LIBYA						
Arab Drlg & Workover	ADWOC 1	d-e	1300	Emsco C111	975	20
	ADWOC 2	d-e	2600	Emsco C111	1500	20
	ADWOC 3	d-e	2600	Emsco C111	1500	20
	ADWOC 4	del	425	Wils 42BLC Trailerized	325	6
	ADWOC 5	del	425	Wils 42BLC Trailerized	325	6
	37	del	1550	Nat 80B	1600	12
LIBYA (Cont'd)						
Arab Drlg & Workover	53	del	1250	Idco H525	700	9
	118	del	1250	Idco H525	700	9
Challenger Ltd	19	del	1300	Nat 80B	1950	15
Deutsche Tiefbohr	T-16	del	2000	Emsco A800	1000	12
	T-26	del	2100	Idco Super 711	1500	16
	T-90	del		H-L 6206	400	
	T-91	del		H-L 6205	130	
Forex Neptune and/or Affil	13	del	2500	Idco Super 711	1200	18
	35	d-e	3200	G-D 1110E	1600	18
	42	del	2000	Nat 80UE	1000	15.7
	43	d-e	2000	Nat 80UE	1000	15.7
	44	del	3200	Idco Super 711	1600	18
KCA Drlg	83	del	2000	MC U36EA	1000	10
	100	del	750	Crdw KM250	375	6
	101	del	375	Cbot 1058	375	12
	102	del	375	Cbot 1058	375	12
	103	del	375	Cbot 1058	375	12
Oil Drlg & Expl	7	del	2000	Idco Super 711	2000	17
	9	del	2000	Idco Super 711	2000	17

AFRICA (Cont'd)

LIBYA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Pool-Intairdril	2	dsl	318	Cbot 1287/120	476	5
	3	dsl	318	Cbot 1287/120	476	5
	5	dsl	318	Cbot 1058/120	318	5
	10	dsl	318	Cbot 1058/120	318	5
	22	dsl	400	Idco DIR550	400	6.5
	32	dsl	600	Cbot 750	600	6.5
	33	dsl	600	Cbot 750	600	6.5
	34	dsl	600	Cbot 750	600	7.5
	204	e-e	2000	Idco ED1200	1000	12
	205	el	2000	Idco ED1200	1000	12
	206	e-e	2000	Idco ED1200	1000	12

MADAGASCAR

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Bawden Int'l Ltd	2					

MALI

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Forex Neptune and/or Affil	49	d-e	3200	G-D 1100E	1500	16

NIGERIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Forex Neptune and/or Affil	1	dsl	2600	Idco Super 711	1200	18
	9	dsl	2850	Nat 110	1600	19
	10	dsl	2600	Nat 110	1600	19
	24	d-e	3200	G-D 2100RE	3000	25.4
	26	dsl	2600	Idco Super 711	1200	18
	54	d-e	3200	G-D 1500E	2000	21.7
Saipem	5838	dsl	2500	Idco H1700	2000	16.5
	5847	dsl	2130	Idco H1700	1700	16.5
	5850	dsl	1135	Idco H40	432	6
	5880	dsl	2500	Idco H1700	2000	16.5

SOMALIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Parker Drlg	143	dsl	2000	Nat 110	2250	18

SUDAN

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Forasol	Heli Rig 1	d-e	1800	Idco ESH1200	2000	10
Parker Drlg	220	dsl	1600	OIME SL1000	1000	15
	105-HH/2	dsl	1200	OIME HH1250	1275	14
	119-HH/10	dsl	1950	OIME HH1500	1700	18
	195-HH/42	dsl	2000	OIME TBA2000	2000	20

TANZANIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Blocker Drlg	46					
Deutsche Tiefbohr	T-11					

TUNISIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Blocker Drlg	10	dsl	825	Idco Hydrair H37ESC	434	7.5
	16					
	18	dsl	1475	Cbot 2346	950	10
	45					
	47					20
Forasol	110/2	d-e	2600	Nat 110	1500	16
Forex Neptune and/or Affil	11	d-e	3200	Nat 110UE	1500	19
Saipem	5842	dsl	2250	Idco H1700	1700	16.5
	5846	dsl	2250	Idco H1700	1700	16.5
	5893	d-e	3200	Nat 110UE	1600	17

ZAIRE

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Von Rautenkranz Hermann	ITAG-102	dsl	1000	Wils Mogul 42		10
	ITAG-103					
	ITAG-104	dsl	1000	Wils Mogul		8

ASIA PACIFIC

AUSTRALIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Oil Drlg & Expl	5	dsl	1100	Idco Super 711	1100	13
	6	dsl	1200	Nat 55	850	10
	8	dsl	350	Idco H35	500	4.5
	12	dsl	1500	Idco H725	750	10
	15	dsl	2000	Idco H1700	2000	17
	18	dsl	500	Idco H725	725	10
Pool-Intairdril	9	dsl	420	Cbot 1058/160	420	5
	216	dsl		Wils Super 38	350	3.4
Richter Drlg Pty	2	dsl	1600	Nat 55	900	10
	4	dsl	600	Nat T32	300	6
	5	dsl		Coop 750		10
	8	dsl	1400	Nat 110M	1100	15

ASIA PACIFIC (Cont'd)

AUSTRALIA (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Richter Drlg Pty	9	dsl	2000	Nat 80B	1000	12
	11	dsl		Coop 750	375	10
	14	d-e	2000	Nat 80UE	1000	12
	16	dsl	275	S/B RR550	450	6.5
	97	dsl		Troy 600	455	2.5
Westbridge Drlg (Pty)	219	dsl	1100	Nat 370	700	7
	220	dsl	1820	Nat 80E	1820	14.5

BRUNEI

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Deutsche Tiefbohr	T-41	dsl	1600	Wils 780	780	8

INDIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Saipem	5827	d-e	3200	Idco E2100	2000	20

INDONESIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Bawden Drlg Intl	6	dsl	1000	Nat T45	550	7.5
	9	d-e	3200	Nat 1320UE	2000	22
	28	dsl	925	Emsco GB350	350	7.2
	29	d-e	1400	Nat 80E	1000	12
	51	dsl	1200	Sup 700	700	10
Deutsche Tiefbohr	T-31	dsl	1000	Wils 780	910	8
Forex Neptune and/or Affil	45	d-e	1960	Wils EH120	1100	16.9
Houlder Marine Drlg	1	d-e	1600	Nat 80UE	1000	12
Loffland Bros	56	dsl	900	MC U36A	900	10
	139	dsl	1400	MC U36	900	10
	300	dsl	600	MC U34	500	4
Parker Drlg	106-HH/3	dsl	1600	OIME HH1250B	1275	14
	125-HH/13	dsl	1200	OIME HH1500	1700	18
	146-HH/32	dsl	2000	OIME TBA2000	1700	20
	156-HH/35	dsl	2000	OIME TBA2000	2000	20
	188-HH/38	dsl	2400	OIME TBA2400	2400	24
	190-HH/39	dsl	2000	OIME TBA2000	2000	20
PT Mafhabor Indonesia	MBI 1	dsl	600	Nat 610	750	12
PT Meta Epsi Drlg	1	dsl	1600	Nat 610	850	12
	2	d-e	1050	HS1500E	1500	15
	3	d-e	1050	HS1500E	1500	15
	4	d-e	2600	S/B NE95A	1800	20
	5					
	6					
Richter Drlg Pty	7	dsl	1600	Nat 610	750	10
Westburne WW Drlg	203	dsl	1120	Nat T45	1100	10
	202H	dsl	1120	Nat 4-10	1000	12
	205H	dsl	600	Nat T12	200	5

MALAYSIA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Deutsche Tiefbohr	T-10	dsl	2700	Nat 110H	1500	16

NEW GUINEA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Parker Drlg	115-HH/8	dsl	1200	OIME HH1500	1700	18
	140-HH/28	dsl	1500	OIME TBA2000	1700	20

NEW ZEALAND

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Oil Drlg & Expl	16	dsl	1600	Idco 1200	1600	14
	17	d-e	2800	Idco E2100	2800	21
Parker Drlg	160-HH/37	dsl	2000	OIME TBA2000	2000	20

PAKISTAN

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Challenger Ltd	61E	dsl	2800	G-D 1100E	1500	20
	62E	dsl	2800	G-D 1100E	150	20
Deutsche Tiefbohr	T-35	dsl	1600	Coop LTO750	750	10
	T-37					
Forasol	110/9	d-e	2600	Nat 110	1500	16
	1320/2	d-e	3200	Nat 1320	2000	20
Parker Drlg	126-HH/14	dsl	1500	OIME TBA2000	1700	20
Pool-Intairdril	218	dsl		Idco H44	750	8.5

PHILIPPINES

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
PNOC Energy Drlg	1	dsl	1650		1650	12.5
	3	dsl	1100	Idco H725	1100	8.5
	4	dsl	1350	Nat 610	1100	10
	5	dsl	1350	Nat 610	1100	10
	6	dsl	1350	Nat 610	1100	10
	7	dsl	660	Idco H525	684	8
	8	d-e	2000	Emsco D3	2000	12.5
	9	dsl	1100	Nat 370	730	7
	10	d-e	4000	Idco E2100	2000	21

ASIA PACIFIC (Cont'd)

PHILIPPINES (Cont'd)

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Richter Drlg Pty	6	dsl	1350	Nat 100	1000	14

SINGAPORE

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Westburne WW Drlg	216H	dsl	800	W-M T38	400	4.5
	217H	dsl	1200	W-M T38	400	4.5

THAILAND

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Deutsche Tiefbohr	T-46	d-e	2600	Emsco C2	2000	20
	T-48	d-e	2600	Emsco A800	1000	15
Forasol	110/7	d-e	2600	Nat 110	1500	16
	110/10	d-e	2600	Nat 110	1500	16
Parker Drlg	200-HH/44	dsl	2000	OIME TBA2000	2000	20

CANADA

ALBERTA

Contractor	Rig No.	Type Power	Total HP All Main Mud Pumps	Drawworks Make And Model	Total HP Available to Drawworks	Rated Depth With 4½-in. Pipe, 1000 ft.
Adeco Drlg & Engrg	1	dsl	312	Nat T20M	370	5.9
	2	dsl	380	OIME SD3	365	8.5
	3	dsl	308	Nat T32	320	7
	8	dsl	1500	Nat 100M	2340	16
	12	dsl	312	Nat T32	380	8.2
	14	dsl	312	Nat T32	320	7
	15	dsl	365	Nat T45	575	10.5
	16	dsl	308	Nat T32	312	7
	18	dsl	700	OIME Helihoist 500C	1370	7.5
	19	dsl	308	Nat T32M	320	8.2
	20	dsl	610	Nat 370	475	8.2
Argus Drlg Div Taro Inds	1	dsl	320	Nat T32	327	7.2
	2	dsl	320	Emsco 250T	327	6.5
	4	dsl	320	MC U34	319	6
	5	dsl	1100	Olwl 76	1326	12
	7	dsl	320	Nat T32	327	8.2
Arrowhead Drlg	C-1	dsl	1040	Nat 610	1040	12
	C-10	dsl	1560	Nat 80B	1560	15
	C-11	dsl	1560	Nat 80B	1560	15
	C-2	dsl	770	Nat 370	770	9
	C-4	dsl	1040	Nat 610	1040	12
	C-5	dsl	1560	Nat 80B	1560	15
	C-6	dsl	770	Nat 370	770	9
	C-7	dsl	1040	Nat 610	1040	12
	C-8	dsl	1040	Nat 610	1040	12
	C-9	dsl	1040	Nat 610	1040	12
Atco Drlg	27	dsl	730	Beth C50	730	9
Atco Drlg Bow Island Div	2	dsl	275	W-N 2000	275	2.9
	3	dsl	275	W-N 2000	275	2.9
	6	dsl	275	W-N 2000	275	2.9
	7	dsl	275	W-N 2000	275	2.9
	8	dsl	275	W-N 2000	275	2.9
	11	d-e	275	Cbot 1287	500	5
	17	dsl	275	Unit U34	300	5.5
Atco Drlg Mustang Div	31	dsl	815	S/B N45	720	8.5
	34	dsl	300	Nat T20	350	5.5
	35	dsl	820	Nat T45	820	9
	36	dsl	300	Idco H30AD	300	5.5
	38	dsl		Nat T32		
	39	dsl	300	Nat T20	300	6
	40	dsl	700	S/B N45	650	8.5
	41	dsl	300	Idco H30F	350	6
	42	dsl	650	Idco H35	700	7.5
	45	d-e	1500	Nat 610E	750	12
	50	dsl	300	Idco H30F	350	6
	53	dsl	735	Nat T45	650	9
	51	dsl	715	Idco H35D	650	7.5
	55	dsl	500	Idco H35	365	6.5
Badger Drlg	2	dsl	400	Nat 370	600	7.6
	4	dsl	400	Sup 400	500	7
	5					8.2
	6	dsl	400	Nat 370	600	7.6
	99	dsl	500	Sup 300	450	6.2
Bawden Drlg	12	mch	1700	Emsco D3	1000	16
	16	mch	1800	Emsco D3	1000	12
	17	mch	1100	G-D 500	500	9
	20	mch	1000	G-D 500	500	9
	33	mch	1850	Olwl 860	1400	16
Beaver Drlg	1	dsl	380	Nat T32	300	7
	2	dsl	300	Nat T20	300	6
	3	dsl	300	Nat T20	300	6
	4	dsl	300	Nat T32	300	7
	5	dsl	300	Nat T32	300	7.5
	6	dsl	300	Nat 370	550	8.5
	7	dsl	550	Nat 370	550	9.5
	8	dsl	300	Nat T32	300	7
	9	dsl	550	Nat 370	550	9.5
Blocker Drlg	5	dsl				13
	6	dsl	1000	OIME 1000SL	1500	16
	7	dsl	770	OIME 750SL	1155	14
	9			OIME 750SL		14

CANADA (Cont'd)

ALBERTA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Blocker Drlg	10			OIME 303		10
Brelco Drlg	1	del	800	Olwl 700	900	12
	2	del	800	Olwl 700	900	12
	3	del	600	Olwl 500	750	9
	4	del	600	Olwl 500	750	9
	5	del	600	Olwl 500	750	9
	6	del	600	Olwl 500	750	9
	7	del	800	Olwl 700	900	12
Cactus Drlg	1	del	750	S/B N55	750	8.5
	2	del	940	Nat 55	940	11.5
	3	del	350	MC U34	350	6.5
	4	del	350	MC U34	350	6.5
	5	del	1554	Idco Super 711	1554	15
	6	del	900	Crdw AO	900	9.5
	7	del	700	Emsco GB350	700	8.5
	8	del	350	MC U34	350	6.5
	9	del	350	MC U34	350	6.5
	10	del		Nat T32	700	7.8
	14	del	750	Emsco GB500	750	8
	15	del	750	Emsco GC350	750	6.5
	16	del	500	MAC 300	500	6.5
	17	del	500	MAC 300	500	6.5
	18	del	500	MAC 300	500	6.5
	19	del	500	MAC 300	500	6.5
	22					
	23					
	24	del	300	Beth S55	300	6
	28	del	1200	S/B N75	1200	12.5
	20E	del	1200	Emsco D2	1200	14
	25E	d-e	3400	Emsco C2	2000	20
	26E	d-e	2700	Emsco D3	500	18
Can-Tex Drlg & Expl	5	del	1200	Emsco GB800	1200	12
	6	del	1400	Emsco GB80083	1275	14
	7	del	1000	Emsco D2	900	12
	8	del	820	Olwl 66	820	9
	10	del	800	Nat 370	450	8
Centennial Drlg	1	del	360	MC 60005	350	5.5/ 3.5"
	3	del	480	Nat T32	750	8.5
Challenger Drlg-Calgary	JB8E	d-s	2400	Nat 80UE	2800	15
	2	del	650	Nat T45	608	9
	11	del	350	Nat T20	456	5.7
	39	del	350	Nat T20	456	5.7
	44	del	1300	Nat 80B	1950	15
	50	del	2000	Nat 110	2385	19
	51	del	1630	Nat 110	1980	19
	55	del	1180	Nat 100HD	1470	16.5
	4-E	d-e	1170	Nat T45	1005	9
	5-E	d-e	1220	Nat 55	1830	12.5
	8-E	d-e	1500	Nat 80E	2250	14.5
	10-E	d-s	2000	MC U1220EB	2800	22/ 5"
Ensign Drlg	1	del	440	Cbot 44	280	6.6
	2	del	440	Emsco	440	1.9
Guthrie McLaren Drlg	1	del	300	Olwl 52T	400	7
	2	del	300	S/B N4	300	6.5/ 3.5"
	3	del	680	Nat 50CA	600	10
	4	del	375	Sup D500	450	7
	5	del	750	Nat 50CA	400	8.5
	6	del	300	Fail 2500A	225	3
	8	del	300	Fail 2500A	225	3
	9	del	1940	OIME 1500	1940	18
	10	del	300	Sup D500	450	7
	11	del	450	Sup 500	450	7
	12	del	325	Sup S400	300	6.2
Hi Tower Drlg	1	d-e	3600	Nat 1320UE	2000	20
	2	del	780	Olwl 66	800	9.5
	3	del	900	Olwl 66	1020	10
	5	d-e	1000	Idco E725	1000	9.5
	6	d-e	1000	Idco E725	1000	9.5
	7	del	1200	Olwl 66	1000	10
	10	del	1150	Olwl 76	1220	10
	11	del	350	Sup 400	540	6.5
	18	d-e	1800	Olwl 780	1000	15
	19	del	670	Olwl 52T	545	7
	20	d-e	1800	Olwl 780	1000	15
Jade Drlg	1	del	450	Wils Super 38	300	3.5
	2	del	400	Wils Super 38	300	3.5
	3	del	550	Idco H25	380	7.5
	5	del	500	Idco H30	420	7.5
Jomax Drlg	1	del	800	Olwl 52T	455	2.6
	2	del	800	Olwl 52T	455	2.6
	3	del	800	Olwl 52T	455	2.6
	4	del	1200	Olwl 76A	1275	4.3
	5	del	875	Nat 50A	875	10.5
	6	d-e	2400	Olwl 780	1800	5
	7	d-e	2400	Olwl 780	1800	5
Kenting Drlg	4	del	720	610	720	11.5
	5	del	350	Sup 400	350	7.5
	9	del	720	Nat T32	720	7.5
	10	del	720	Olwl 66	720	10
	15	del	720	Nat 370	720	9
	18	del	800	Nat 50A	800	9.5/ 5"
	27	del	1040	Nat 610	1040	12
	28	del	700	Nat 370	700	9
	29	del	1040	Nat 610	1040	12
	37	del	350	Sup 400	700	7.5
	36	del	800	Nat 370		9.5
	20-E	d-e	2400	Unit 914EC	2000	20
	22-E	d-e	2000	Nat 80UE	1000	13
	23-E	d-e	2000	Nat 610E	1000	11.5
	39-E	d-e	1100	Nat 370E	1100	10
KCA Drlg	C1	del	1200	Nat 55	612	10
Loffland Bros	9	d-e	2000	MC U914	1980	20
	36	del	2000	MC U914C	2880	20
	72	del	1700	MC U914	2880	20
	93	d-e	2100	MC U1220EB	2400	25
	198	del	1400	MC U914A	1599	18
Montgomery Drlg	42	d-e	2000	Nat 110UE	2000	20
	49	d-e	2000	Nat 110E	2000	20
Nabors Drlg	4	del	2000	Olwl 76	1740	14
	5	del	700	Olwl 76	1326	12
	15	del	1200	Emsco A550	884	11
	16	del	2000	Emsco A800	1740	15
	19-E	d-e	2000	Emsco CI	3000	20
	21-E	d-e	3200	Emsco IIC	3800	20
	24-E	d-e	2000	Emsco Electrohoist 2C	2925	18
Parker Drlg	98	del	1500	Nat 100	1000	17
Phelps Drlg Intl	1E	d-e	1200	MC U36EA	800	11
	18	del	500	TSM 6000	450	7
	19	del	500	TSM 6000	450	7
	20	del	500	TSM 6000	450	7
	23	del	1000	Nat 370	550	9.5
	24	del	1000	Nat 370	550	9.5
	4E	d-e	700	Sup 700E	700	9
	5E	d-e	700	Sup 700E	700	9
Precision Drlg	1	del	350	Idco H30FD Super	350	6.5
	2	del	350	Idco H20AD	350	4.5
	4	del	350	Idco H30D	350	7.2
	5	del	350	Idco H525D	350	7.5
	6	del	350	Idco H30	350	6.5
	7	del	350	Idco H30D	400	8
	8	del	350	Idco H30D	350	6.5
	9	del	350	Idco H30D	350	7.5
	10	del	350	Idco H35D	350	7.2
	11	del	350	Idco H40PD	350	7.2
	12	del	500	Idco H30D	350	7.5
	14	del	350	Idco H40	500	7.5
	15	del	350	Idco H30FD	350	7.5
	16	del	700	Emsco PD650	650	10
Red Arrow Drlg	1	del	225	Nat T20	275	6
	3	del	225	Nat T20	275	6
	4	del	225	RAD 200	275	6
	5	del	225	Nat T20	275	6
	6	del	225	RAD 200	275	6
	7	del	225	RAD 200	275	6
	8	del	225	RAD 200	275	6
	9	del	225	RAD 200	275	6
	10	del	225	RAD 200	275	1.8
Regent Drlg	1	del	675	Idco H40	330	7.5
	2	del	840	S/B N55	820	9.5
	3	del	840	S/B N4	900	9.5
	4	del	840	S/B N4	900	9.5
	5	del	840	S/B N4	820	9.5
	8	del	1800	G-D 1100	2100	15
	10	del	830	S/B N4	900	9.5
	11	del	2200	Olwl 840E	2592	20
	21	del	2200	Olwl M2000	2592	20
	22	del	830	MC U36A	500	8.5
	23	del	800	S/B N4	820	9.5
	24	del	800	S/B N4	900	9.5
	25	del	1400	S/B N45	1400	14
	26	del	840	Idco H40	330	7.5
	28	del	1400	S/B N45	1400	14
	29	del	350	S/B N4	365	6
	14-E	del	2800	Olwl 840E	1800	20
	15-E	del	2700	G-D 1500	2000	21
	17-E	del	2700	G-D	1000	14
Rocky Mountain Drlg	1	del	650	Nat 370	650	8.5
	2	del	1150	G-D 500	700	8.5
	3	del	1650	Nat 80	1650	15
	4	del	1050	Unit U36A	1050	10
S & T Drlg	1	del	1100	Nat 55	1100	11
	2	del	350	Nat T32	350	7
	3	del	1200	Nat 55	1200	11.5
	4	del	700	Nat 50CA	400	8
	5	del	1150	Nat T45	800	9.5
	6	del	1200	Nat 610	1200	11.5
	7	del	1200	Nat 610	800	10.5
	9	del	800	Nat 370	800	8.5
	10	del	350	MC U34	350	6.5
Sedco Drlg	71	del	350	Sup 400	400	6
	77	del	375	Sup 400	400	6
	79	del	318	G-D 3000	318	4/3.5
	81	del	375	Sup 400	318	6
	83	del	350	Crdw 150A	318	4.2
	86	del	175	Kremco K600	450	5
	88	del	350	Crdw S350	350	5.5/ 3.5
	89	del	350	Idco H30D	318	5/3.5
	90	del	350	MC U34D	456	5.5
	91	del	330	Emsco GB250	456	6.5
	92	del	350	Crdw 350	350	4.5
	93	d-e	500	Sup 400E	450	7
	95	del	300	Sup 400	456	6
	96	del	300	Idco H25	318	4.5
	97	del	300	Nat T32	456	6.6
	99	del	500	Sup 700E	550	7
Shelby Drlg	1	del	319	Coop 3000D	318	5
	2	del	319	Coop 3000D	300	5
	3	del	319	Cbot 1287	475	6.5
	5	del	630	Coop 550		7.5
	8	del	1200	OIME 750SL	1200	14
	10	d-e	700	Sup 400E		8.5
Simmons Drlg	8	del	450	Troy 600	700	10
	11	del	350	Hycalog HH6000	350	6.8
	12	d-e	600	G-D 500E	700	10
	19	del	575	Troy M600	535	7.5
	21	del	350	Troy 300	350	6.2
	23	del	350	Troy 300	350	6.2
	25	del	350	Mac 300	350	6
Spartan Drlg	2	d-e	700	Sup 700E	700	1
	3	d-e	550	Sup 400E	400	7.5
	21	d-m	700	Shaf 6030	600	6.5
	22	d-m	700	Nat 370	600	9
	24	d-m	380	Sup 300	300	5.5
	44			Nat T8		
Tri-City Drlg	1	del	250	Fail 2500	200	3
	2	del	300	MC U34	3000	6
	3	del	250	Fail 2500	200	3
	4	del	300	Fail Stratmaster 90	280	5
	5	del	250	Fail 2500	210	3
	7	del	250	Fail 2500	210	3
	8	del	300	Fail 3500	280	3.5
	9	del	300	Sup 300	300	4.5
	10	del	300	Sup 300	300	4.5
Westburne Drlg Canada	1	del	1650	Nat 80B	1650	14.5
	4	del	1100	Emsco GC500	1100	11
	8	del	350	Sup PSD400	350	7.9
	10	del	1470	Nat 80	1470	14
	12	del	700	Nat 370	700	8
	14	del	1050	Nat 50A	1050	9.5
	15	del	700	S/B N7	700	8.5
	17	del	700	Emsco GB350	700	8
	24	del	350	Nat T32	350	7.5
	26	del	350	Nat T32	350	7
	28	del	1455	Nat 55	1455	11
	30	del	600	Kutryk KS1	700	5
	33	del	350	G-D 3000	300	3.5
	34	del	350	Idco H25CD	350	4.5
	35	del	350	Fail 2500	300	3
	37	del	350	G-D 2500	175	3.5
	38	del	350	Sup 300	300	4.9
	39	del	350	Fail 3500	300	3.5
	40	del	350	Fail 2500	175	3
	42	del	350	Nat T20	350	5.5
	50	del	350	Fail 2500	175	3

BRITISH COLUMBIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Adeco Drlg & Engrg	6	del	1500	Nat 100M	2340	18
Atco Drlg Bow Island Div	4	del	275	W-N 2000	275	2.9
	9	del	275	W-N 2000	275	2.9
	10	del	275	W-N 2000	275	2.9
Bawden Drlg	8	d-e	2200	Olwl 860	1400	20
	25E	d-s	2000	Emsco C1 Type II	1500	18
Centennial Drlg	2	del	380	Emsco 250GA	350	5.5/ 3.5"
Challenger Drlg-Calgary	15	del	800	Idco Sup 711	1300	12.5
Hi Tower Drlg	12	del	280	Nat T32	335	6.5
	14	del	280	Olwl 52T	350	6.5
	21E	d-e	3200	Emsco D3	1000	15
Jade Drlg	4	del	625	Idco H25	430	7.5
Kenting Drlg	7	del	720	Emsco GC500	720	10.5
	24	del	350	Nat 370	350	9
Loffland Bros	3	del	1850	MC U914A	2880	18
	171	d-e	2132	MC U914B	1700	18
Montgomery Drlg	46	d-e	2000	Nat 1320UE	2000	20
Nabors Drlg	3	del	1700	Olwl 76	1326	14
	6	del	300	Idco H35	300	6
	9	del	2000	Nat 110	2250	18
	23-E	d-e	1600	Emsco D2	1800	14
Parker Drlg	94	del	1700	Nat 100M	1000	18
Regent Drlg	12-E	del	2200	G-D 1500	2592	20
Westburne Drlg Canada	22	del	700	Nat 50A	700	8.5

MANITOBA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Red Arrow Drlg	2	del	225	Nat T12	275	5

NORTHWEST TERRITORIES

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Adeco Drlg & Engrg	4	del	1380	OIME Helihoist 1500	2000	17
Atco Drlg Mustang Div	76	del		Nat 370	730	8.2
Bawden Drlg	1	mch	1000	Emsco GB500	500	8.5
Hi Tower Drlg	4	d-e	3200	Olwl E2000	2000	25
	17	del	560	Nat 50A	340	7

CANADA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
NORTHWEST TERRITORIES (Cont'd)						
Kenting Drlg	32-E	d-e	3720	Nat 110UE	2000	18
	33-E	d-e	1000	Sup 700E	700	9
Pan Arctic Drlg	A	d-s	1000	OIME 1000E	1000	12
	B	d-s	1000	Nat 80E	800	12
	C	d-s	1000	OIME 1000E	1000	12
Parker Drlg	99-HH/6	del	1500	OIME Hellhoist 1500	1500	17
Spartan Drlg	10	d-e	2000	Emsco E	2000	24
	20	d-e	600	Olwl 500E	500	9
ONTARIO						
Underwater Gas Dev	6			I-R T5	400	5
QUEBEC						
Regent Drlg	6	del	1400	S/B N45	1400	14
SASKATCHEWAN						
Adeco Drlg & Engrg	17		690	OIME SL750	1035	14
Argus Drlg Div Taro Inds	3	del	320	MC U34	319	6
Atco Drlg Bow Island Div	1	del	275	W-N 2000	275	2.9
	5	del	275	W-N 2000	275	2.9
	18	del	275	Nat T12	300	5
Atco Drlg Mustang Div	32	del	300	S/B N4		5.5
	33	del	300	Nat T20	300	5.5
	51	del	300	Idco H25	350	6
Badger Drlg	1	del	400	Idco H30	350	5.9
Blocker Drlg	3	del	770	OIME 750SL	1155	14
Cactus Drlg	11	del	350	MC U34	350	6.5
Guthrie McLaren Drlg	7	del	300	Nat T32	300	7/3.5"
Precision Drlg	3	del	350	Idco H30 Super 2FD	350	6.5
Red Arrow Drlg	11	del	225	RAD 200	275	6
	12	del	225	RAD 200	275	1.8
Sedco Drlg	80	del	375	Shaf 6000	456	6
	82		375	Sup 300	318	4.5
	84	del	320	Sup 300	318	4.5
	85		300	Sup 300	318	4.5
	87	del	300	Crdw L	318	4
	94	del	300	Crdw L	210	4
	96	del	350	Nat T20	456	6
Simmons Drlg	2	del	450	Troy 600	535	7.5
	4	del	350	Olwl 52T	350	6.6
	14	del	450	Troy M600	535	7.5
	15	del	350	MC U34	350	6
	22	del	350	Troy 300	350	6.2
	24	del	350	Troy 300	350	6.2
Spartan Drlg	1	d-m	380	Sup 300	300	5.5
	5	d-m	380	Sup 300	300	5.9
	14	d-m	500	Sup 300	300	5.5
	23	d-m	700	Sup 300	300	5.5
	27	d-m	380	Sup 300	300	6
Tri-City Drlg	6	del	250	Fail 2500	210	3

CENTRAL AMERICA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
BARBADOS						
Well Services	10			G-D 500		9
BELIZE						
Hughes Drlg	8	del	Cat 110	Idco H35	400	6.5
GUATEMALA						
Forex Neptune and/or Affil	30	d-e	3200	G-D	2000	21.7
	39	del	1300	Idco H525	500	9
	47	d-e	3200	G-D 1100E	1500	18
Helmerich & Payne (Guatemala)	45	d-s	3000	Nat 1320UE	2000	25

EUROPE

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
AUSTRIA						
Preussag Aktiengesellschaft	GH35	del	2000	DeMg GH35	1500	16.5
DENMARK						
Kenting Drlg Serv	26	del	700	Sup 400	350	7/4"
FRANCE						
Boldon Drlg	81	d-e	1800	Nat 80UE	2000	14.5/5"
Cosifor	N-110	del	2500	Nat 110	1500	18
	80E	del	1500	Emsco 350	550	9
	610E	d-e	1600	Nat 610E	800	12
Forasol	E 160	mch	100	C-E 160	250	
	E900-1	d-e	2000	Idco 900	1000	12
	E900-2	d-e	1600	Idco 900	1000	12

EUROPE (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
FRANCE (Cont'd)						
Forasol	GD 2100	d-e	3200	Nat 2100	2000	21
	H 25	mch	130	Idco 25	300	
	H 35	mch	800	Idco 35	400	5
	H 525	d-e	2000	Idco 525	750	8
	H 725	mch	1600	Idco 725	800	9
	WN1	mch	500	W-N 250H40	400	5
	110/6	d-e	3200	Nat 110	1500	16
	110/8	d-e	2600	Nat 110	2000	16
	80-BI	d-e	2000	Nat 80	1000	12
	80-B4	d-e	2600	Nat 80	1000	12
	110/12	d-e	2800	Nat 110	1500	16
	1320/1	d-e	3200	Nat 1320	2000	20
	1625/3	d-e	3200	Nat 1625	3000	25
Forex Neptune and/or Affil	16	d-e	2900	Emsco 1100DE	1500	18
	17	del	2000	Emsco A800	800	12
	19	del	1650	Nat 55	780	10.8
	22	d-e	3200	G-D 2100	2300	25.4
	28	del	1200	Idco H25	250	4.4
	29	del	450	Nat 55	700	10.8
	50	del	1700	Emsco D2	900	10
ICELAND						
Orkustofnun State Drlg Contrs	DOFRI	del	1350	Olwl 52T	320	7.3
	GLAUMUR	del	290	Fail 2000	290	3.7/2.88"
	JOTUNN	d-e	1500	G-D 700E	750	14
	NARFI	del	580	Fail 3000	290	6/3.5"
	YMIR	del	180	May 1000	180	1.8/2.37"
ITALY						
Forasol	80-B3	d-e	2600	Nat 80	1000	12
Pool-Intairdril	211	e-s	1300	Idco 1700	2000	17
	212	e-s	1200	Idco 1200	1000	12.5
Saipem	5803	del	1400	Idco H711	885	11.4
	5829	d-e	2000	Emsco D3	1000	12
	5832	d-e	3200	Idco E2100	2000	20
	5833	d-e	3200	Idco E2100	2000	20
	5836	del	2600	Idco 1350S	1950	18
	5840	del	2600	Idco H1700	1700	16.5
	5844	del	1000	Idco H30		4
	5848	del	2600	Idco H1700	1700	16.5
	5852	d-e	880	Idco E525	625	6
	5855	del	1800	Idco H1200	1740	13
	5856	del	1700	Idco H1200	1740	13
	5858	del	1135	Idco H40	432	6
	5864	d-e	3200	Emsco C3 Type II	3000	30
	5870	d-e	3200	Nat 1625 DE	3000	25
	5872	d-e	2600	Nat 1625 DE	3000	25
	5888	d-e	3200	Nat 1625 DE	3000	25
	5889	d-e	3200	Idco E3000	3000	30
	5891	d-e	3200	Nat 110UE	1600	17
	5892	d-e	3200	Nat 110UE	1600	17
	5898	d-e	2600	Idco HE1700	1600	16.5
	5899	del	1400	Crdw 03	1050	10.4
NETHERLANDS						
Deutsche Tiefbohr	T-19	del	2600	Nat 80BE	1000	14
	T-27	d-e	3200	Nat 130	1625	20
	T-32	del	420	Idco H35KD	300	3
	T-40	d-e	2600	Nat 80B	1000	15
SPAIN						
Compania Gen De Sondeos SA	1	del	1050	Emsco G450	450	10
	2	del	2700	Nat 110M	2000	19.7
	3	del	2400	G-D 800	1500	14.8
	4	d-e	2600	Nat 1320UE	2500	20
	5	del	1200	S/B 650	575	8.5
Forasol	1320/3	d-e	3200	Nat 1320	2000	20
	1625/2	d-e	3200	Nat 1625	3000	25
Sonpetrol	GD-2	del	1100	G-D 500	600	10
	N-11					
	N-7	del	3200	Nat 1625	3000	25
	N-8	del	2000	Nat 80UE	1000	14
	N-9	el	2600	Nat 110	2750	16
TURKEY						
KCA Drlg	71	del	1800	Nat 80B	1000	12
	73	del	1800	Nat 80B	1000	12
UNITED KINGDOM						
Boldon Drlg	41	del	1300	Nat 600	475	8/5"
	61	d-e	1200	Olwl 660E	700	10/5"
Houlder Marine Drlg	2	d-e	1600	Sup 700E	1000	9
Kenting Drlg Serv	12	del	700	S/B N45	350	8/4"
	17	del	350	Fail 90	350	5/3.5"
	19	del	350	G-D 3000	230	4.5/3.5"
	21	d-e	2000	Nat 80UE	1000	14/5"

EUROPE (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNITED KINGDOM (Cont'd)						
Kenting Drlg Serv	31	d-e	2000	Nat 80UE	1000	14/5"
	34	d-e	1600	Nat 610UE	750	11.5
	35	d-e	1600	Unit 36AE	700	10
	36	d-e	1600	Sup 700UE	700	10
KCA Drlg	84	d-e	1600	Nat	800	10
	85	d-e	1600	Nat	800	10
	94	del		Cbot 550	375	4.5
WEST GERMANY						
Deutsche Tiefbohr	T-1	del	335	Idco H1000	910	8
	T-3	del	420	Idco H44CD	480	5
	T-30	d-e	1000	Idco E725D	725	8
	T-36	del	1600	Idco H1000	950	8
	T-4	del	500	Idco H30	455	6
	T-45	d-e	2600	Emsco C2	2000	20
	T-47	d-e	3900	Emsco C3	3000	30
	T-49					
	T-5	del	335	Idco H525D	910	6
	T-7	del	1300	Nat 80B	1000	11
	T-8	del	335	Idco H1000	910	8
	T-81	del	375	Coop LTO350	200	4
	T-82	del	375	Coop LTO350	200	4
	T-83	del		Salt ZA198	200	
	T-84	del		Salt ZA198	200	
	T-85	del		Salt ZA198	200	
	T-86					
	T-92	del		H-L 6205	130	
	T-93	del		H-L 6205	130	
Preussag Aktiengesellschaft	GH-25	del	2000	Wirth GH25	1500	14
	ZA292	del	500	Salt	180	3
	900/1	del	1500	Cbot 2346	840	10
	900/2	del	1500	Cbot 2346	840	10
	900/3	del	1450	Cbot 2346	900	10
	1320UE	d-e	3200	Nat 3120UE	2000	25
Von Rautenkranz Hermann	ITAG 22	del	2500	Nat 110M		20
	ITAG-108	del	1200	Wils M75		10
	ITAG-109	del	800	Wils M75		10
	ITAG-23	d-e	3000	Olwl 2000E		25

MIDDLE EAST

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½ - in. Pipe, 1000 ft. •
UNDESIGNATED						
Henley Drlg	1	del	2000	OIME SL1000	1500	14
BAHRAIN						
Santa Fe Drlg	142	del	2800	Nat 110UE	1500	18
IRAQ						
Saipem	5843	d-e	2800	Olwl E2000	2000	20
	5849	del	2600	Idco H1700	2000	16.5
KUWAIT						
Parker Drlg	180	d-e	3200	OIME 3000E	3000	30
Santa Fe Drlg	KDC 10					
	KDC 11					
	KDC 5					
	KDC 6					
	KDC 7					
	KDC 8	d-e	2800	OIWELL E2000	2000	20
	KDC 9	d-e	2900	Olwl E2000	2000	20
	90	d-e	2000	Nat 1320DE	2000	20
	145					
OMAN						
Deutsche Tiefbohr	T-17	d-e	2700	Nat 1320UE	1800	20
	T-18	del	3200	Nat 55	1000	11
	T-29	d-e	2800	Nat 1320ME	2000	20
	T-33	del	1600	Nat 55	1000	11
	T-34	del	1600	Idco H1000	960	8
Forex Neptune and/or Affil	12	del	1800	Idco Junior 1200	1400	11.5
	15	d-e	3200	G-D 1500 E	2000	21.7
	21	d-e	3200	G-D 2100E	2300	25.4
	23	d-e	3200	G-D 2100RE	3000	25.4
	32	d-e	3200	G-D 1100E	1500	18
	34	d-e	3200	G-D 1100	1500	18
	57	del	2000	Olwl 780	1000	15
	58	del	2000	Nat 80B	1000	15.7
Pool-Intairdril	6	del	800	Cbot 750	650	7.5
Santa Fe Drlg	121	d-e	3400	Olwl 2000E	3000	25
QATAR						
Deutsche Tiefbohr	T-6	del	500	Idco H1000	910	8
Santa Fe Drlg	89	d-e	2000	Nat 110UE	1800	16
	131					
SAUDI ARABIA						
Arabian Drlg	AD10	del	750	I-R 2042/180	700	10
	AD3	d-e	2950	Idco Super711	2000	16

MIDDLE EAST (Cont'd)

SAUDI ARABIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Arabian Drlg	AD4	d-e	2100	Nat 110UE	2000	14
	AD5	del	750	MC U36A	850	10
	AD6	del	750	MC U36A	850	10
	AD7	del	750	Nat 370	800	10
	AD8	del	750	I-R 2042/180	700	10
Blocker Drlg	7	del	1400	Cbot 900	950	10
	18	del	1475	Cbot 2346	950	10
Loffland Bros	126	d-e	3200	MC U1220ESD	2000	25
	127	d-e	3200	MC U1220ESD	2000	25
	128	d-e	3200	MC U1220EDB	2000	25
Pool Arabia	15	del	420	Idco BIR550	420	6.5
	23	del	300	Idco H40	450	8
	29	del	420	Cbot 1058	420	6
	40	del	800	Cbot 700	800	6.5
	128	del	800	Cbot III	450	6.5
	138	del	450	Cbot	400	6.5
	190	del	550	Cbot	700	7.5
	191	del	550	Coot	700	7.5
	192	del	900	I-R 2042/180	700	8.5
	193	del	500	I-R 2042/180	700	8.5
	194	del	750	I-R 2042/180	700	8.5
	195	del	750	I-R 2042/180	700	8.5
	201	del	1400	Oiwl	1000	12
	202	del	1400	Oiwl	1000	12
	203	del	1400	Oiwl	1000	12
Santa Fe Drlg	67	d-e	2400	Nat 1320DE	3400	20
	70	d-e	2000	Nat 1320DE	3400	20
	101	d-e	2800	Nat 110UE	1500	16
	109	d-e	2800	Nat 110UE	1800	16

SYRIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Forex Neptune and/or ARI	18	del	900	Idco H40	500	9
	25	d-e	3200	G-D 2100RE	3000	25.4
	33	d-e	3200	G-D 1100	1500	18
	36	d-e	3200	G-D	1800	16

UNITED ARAB EMIRATES

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Forex Neptune and/or ARI	40	d-e	2000	Nat 80UE	1000	15.7
	56	del	2000	Nat 80B	1000	15.7
Geoprosco Intl	36	del	725	Idco H800	725	10
	42	d-e	725	Idco ED800	1000	10
	43	d-e	700	Idco ED400	1000	10
National Drlg	1					
	2					
	8					
	9					
	10					
	11					
Pool-Intairdril	213	el	900	Idco 900	1000	10.5
	214	el	900	Idco 900	1000	10.5
	215	el	900	Idco 900	1000	10.5
Saipem	5828	d-e	3200	Idco E2100	2000	20
	5887	d-e	3200	Nat 1625 DE	3000	25
Santa Fe Drlg	93	d-e	1700	Nat 80UE	700	12
	104	d-e	3400	Nat 1100UE	1500	18
	139	del	3400	Oiwl E2000	2000	25
	144					
Sedco Inc	91	d-e	3400	Nat 110UE	2000	16
	95	d-e	3400	Nat 1320UE	2000	20
	96	d-e	3400	Oiwl E2000	2800	20
	97	d-e	3400	Oiwl E2000	2000	20
Sonat Offshore Drlg	14	del	2800	Emsco C2 Type II	2000	20
Westburne WW Drlg	210	del	2800	Nat 1320E	2000	20
	211	del	2800	Nat 1100UE	1500	18
	213	del	2800	Nat 110UE	1500	18

YEMEN

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Westburne WW Drlg	212	del	2800	Nat 110UE	1500	18

SOUTH AMERICA

ARGENTINA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Compania Naviera Perez Companc	1	del	1400	Crdw J450	700	6.9
	2	del	1400	Crdw J450	700	6.9
	3	del	1400	Crdw J450	700	6.9
	4	del	1400	Crdw J450	700	6.9
	5	del	1400	Crdw KM250	350	5.9
	6	del	1400	Crdw KM250	350	5.9
	29	del	1800	G-D 700	700	10
	36	del	1800	G-D 800	1050	12
	37	del	1400	Crdw KB210	350	5.9
	42	del	1000	G-D 700	1700	10
	45	d-e	2800	Idco E1700	1700	15.2
	46	del	1500	G-D 500M	700	10
Quitral-Co SAIC	P-01	d-e	2000	Emsco Electrohoist II	2100	16.5
	P-02	d-e	2000	Emsco Electrohoist II	2100	18

SOUTH AMERICA (Cont'd)

ARGENTINA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Quitral-Co SAIC	P-07	del	1300	Idco H40	450	6.5
	P-08	del	1300	MC U36	900	10
	P-12	del	1500	Wils	530	2
Rio Colorado SA	E-101	del	1250	MC U36A	700	10
	E-102	del	1250	MC U36A	1000	10
	E-103	del	1250	MC U36A	1000	10
	E-104	del	1000	Idco H525	800	10
	E-105	del	1000	Emsco GC350	800	9
	E-106	del	1000	Emsco GC350T	1000	9
	E-107	del	1800	Nat 100N	1500	16
	E-108	del	1250	Nat	800	10
	E-109	del	1250	Nat N75	1500	11
	E-110	del	1000	Idco H40	500	8
	E-111	del	1500	G-D 800DW	900	11
	E-112	del	1000	Idco H40	500	6.5
	E-113	del	1600	G-D 800DW	1200	12
	E-125	del	860	Idco H37	500	6.5
	E-126	del	2600	Nat 1320UE	2000	20
	E-127	d-e	2000	G-D 1500E	2000	20
	E-128	d-e	1140	Idco E525	1000	10
	E-129	del	1600	Nat 75	1000	10
	E-130	del	1320	Idco H40	450	8
	E-132	del	1320	Idco H40	560	8
	E-134	d-e	2800	Nat 1625DE	3000	25
	E-137	del	1900	Idco H1200	2500	15
	E-301	del	230	Crdw KB500	380	12
	E-302	del	180	W-M 1538B	380	11
	E-307	del	180	Idco H-25	380	10
	E-309	del	230	Idco KB210A	280	10
	E-310	del	230	Crdw KB200C	380	10
	E-317	del	560	Crdw KB200C	370	10
	E-318	del	550	Idco H30	230	11
	E-319	del	550	Idco H30	230	11
	E-320	del	560	Idco H30	230	11
	E-323	del	550	Idco H30	230	11
	135	del	1100	Idco H40	600	8
	136	del		Idco H40		8
	146	del				15
	303	del		W-M 1538B		11
	304	del		W-M 1538B		11
	305	del		Wils Super 38		11
	306	del		Crdw K210A		10
	308	del		Crdw K200		10
	311	del		Wils Super 38		11
	312	del		Crdw KB150		9
	321	del		Idco M20D		8.5
	322	del		Idco M20D		8.5
	324	del		Idco M20D		8.5
	325	del		Idco H25		8.5
	326	del		Crdw KB210A		10
	327	del		Idco H20		8.5

BOLIVIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Helmerich & Payne Rasco	9	d-e	1800	HS1500	1500	18
	11	d-e	1800	HS1500	1500	18

BRAZIL

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Odebrecht Perfuracoes	EG-1			Idco 2000		20/5"
	EG-2			Idco 2000		20/5"
Parker Drlg	132-HH/20	del	1500	OIME TBA2000	1500	20
	134-HH/22	del	1500	OIME TBA2000	1500	20
	151-HH/34	del	1500	OIME TBA2000	1500	20
	195-HH/40	del	2000	OIME TBA2000	2000	20
Rio Colorado SA	E-121	d-e	2800	S/B N95A	2000	16
	E-122	d-e	2800	S/B N95A	2000	16
	E-123	d-e	2800	Nat 1320E	2000	20
	E-124	d-e	2800	Nat 1320E	2000	20

COLOMBIA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Helmerich & Payne (Colombia)	7	d-e	2000	HS1500	1500	18
	10	d-e	1800	HS1500	1500	18
	16	d-e	2800	HS1500	1500	18
Parker Drlg	104	del	1500	Nat 50A	1500	10
	158	del	1500	Nat 80B	1500	14
	206	del	2000	OIME TBA2000	2000	20
	209	del	750	Nat 50	750	10
	216	del	3200	OIME 2000M	3200	25
	110-HH/9	del	1500	OIME HH1500	1500	17
	187-HH/43	del	2000	OIME TBA2000	2000	20
Pool-Intairdril	207	del	400	Wils Mogul 42	400	
	208	del	2000	OIME	1000	12
	209	del	2000	OIME	1000	12

SOUTH AMERICA (Cont'd)

COLOMBIA (Cont'd)

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Rio Colorado SA	144	del		S/B N95		14

ECUADOR

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Helmerich & Payne Del Ecuador	12	d-e	1800	HS1500	1500	18
	18	del	800	Coop LTO800	350	6
Parker Drlg	135	del	1500	OIME TBA2000	1500	20
	219	del	3200	OIME 2000M	3200	25
Pool-Intairdril	128	del	230	Wils Mogul 42	450	6.5
	210	del	400	Wils DD42438	430	3
	217	del	400	Idco H37	450	

PERU

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Blocker Intl	21	del	550	Idco H37	456	7
	22	del	550	Idco H37	456	7
	23	del	550	Idco H37	456	7
	24	del	550	Idco H37	456	7
	31					15
	34					15
Parker Drlg	156	del	1500	OIME TBA2000	1500	20
	207	del	2000	OIME TBA2000	2000	20
	107-HH/4	del	1500	OIME HH1250A	1500	15
	108-HH/5	del	1500	OIME HH1500	1500	15
	127-HH/15	del	1500	OIME TBA2000	1500	20
	131-HH/19	del	1500	OIME TBA2000	1500	20
	144-HH/30	del	1500	OIME TBA2000	1500	20
	145-HH/31	del	1500	OIME TBA2000	1500	20
	154-HH/35	del	1500	OIME TBA2000	1500	20
Rio Colorado SA	E-114	del	900	Crdw KT250	500	6
	E-115	del	900	Crdw KT250	500	6
	E-116	del	900	Crdw KT250	500	6
	E-117	del	900	Crdw KT250	500	6
	E-118	del	600	I-R RT5	200	3
	313	del		Crdw KB150		9
	314	del		Crdw KB150		9
	315	del		Crdw KB150		9
	316	del		Crdw KB150		9

TRINIDAD

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Skinner Marine Oper	15	del	280	Cbot 208CA Rocket	280	3
	16	del	680	Cbot 1287	300	4
	17	del	1200	Oiwl 660		9
	18	d-e	4000	Oiwl 840E	2000	16
Well Services	1			G-D 500		9
	2			G-D 500		9
	4			Nat T32		6.5
	9			Nat 1320UE		20

VENEZUELA

• Contractor	Rig No. •	Type Power •	Total HP All Main Mud Pumps •	Drawworks Make And Model •	Total HP Available to Drawworks •	Rated Depth With 4½-in. Pipe, 1000 ft. •
Helmerich & Payne CA	3	del	600	Idco H37	600	6
	6	del	300	Idco H44	400	5
	14	del	600	Idco H37	400	6
	17	del	600	Coop LTO550	600	6
	19	del	600	Coop LTO550	600	6
	20	del	600	Coop LTO550	600	6
	21	del	600	Coop LTO550	600	6
	28	del	1500	Nat 110	1500	10
	30	del	1200	Idco H525	1200	10
	31	del	1200	Idco H525	1000	10
	67	del	1500	Nat 110	1500	18
Loffland Bros	14	del	700	MC U36A	785	9
	24	d-e	2800	Nat 100E	2000	16
	41	del	2000	MC U914C	2000	20
	54	d-e	2900	MC U1220EB	3300	28
	61	del	500	Idco H525	586	6.5
	68	d-e	3200	MC U1220EB	3300	28
	94	d-e	2000	MC U20E	1900	18
Santa Fe Drlg	2	del	1700	Nat 130	1800	20
	8	del	2200	Nat 130	1800	20
	9	del	1850	Nat 130	1600	20
	15	del	800	Idco 525	600	9
	16	del	600	Nat T32	250	5
	20	del	800	Idco H400	350	7
	21	del	1200	MC U914B	1800	20
	22	del	350	Idco H35	350	5
	24	del	350	Idco H35	350	5
	110	d-e	2000	Nat 1320UE	2000	20
	115	d-e	2000	Nat 1320DE	3400	20
	119	d-e	2800	Oiwl E2000	2800	20
	125	del	800	Hoop GXTA	450	6
	129	del	1700	G-D 500M	600	9

International Contract Offshore Drilling Rigs

AFRICA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
ANGOLA							
Foramer/Ile du Levant	JU	13.63	5	Nat 1320DE	20	250	Drilling
Global Marine Drlg/Glomar Adriatic II	JU	13.63	10	Nat 1625DE	25	300	Drilling
Sedco Inc/Sedco 135G	SS	18.75	10	Olwl E3000	20	800	Drilling
Sedco Inc/Sedneth Luanda	JU	13.63	10	Nat 1320UE	20	250	Drilling
BENIN							
Odfjell Drlg & Consulting/Amazone	JU						Drilling
CABINDA							
Keydril/Key Largo	JU	13.63	10	Olwl E3000	30	300	Drilling
Sedco Inc/Sedco 251	JU	13.63	10	Emsco C2	20	250	Drilling
CAMEROON							
Castor/Navifor I	T	16.75	5	Nat 1320UE	20	300	Stacked
Castor/Navifor II	T	13.63	5	Nat 1320UE	20	400	Drilling
Forex Neptune and/or Affil/Searex 2	T	11.00	10	G-D 900E	11	300	Workover
Western Oceanic/Western Polaris I	JU	13.63	10	Nat 1320UE	20	250	Drilling
Western Oceanic/Western Polaris II	JU	13.63	10	Nat 1320UE	20	250	Drilling
CONGO							
Foramer/Barracuda	T	16.75	5	Nat 1320DE	20	400	Drilling
Forex Neptune and/or Affil/Trident IX	JU	13.63	10	G-D 1500E	18	400	Drilling
EGYPT							
Dixilyn-Field Drlg/DF82	JU	13.63	10	Nat 1320UE	20	250	Drilling
Egyptian Drlg/EDC Rig 22	P	13.63	5	Emsco WS10	17		Drilling
Egyptian Drlg/Senusret	JU			Olwl 2000E	25	250	Drilling
Egyptian Drlg/Sneferu	JU			Olwl 2000E	25	225	Drilling
Foramer/Ile de la Martinique	T	16.75	5	Nat 1320DE	20	400	En Route
Global Marine Drlg/Glomar Adriatic VIII	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar High Island II	JU	13.63	10	Nat 1320UE	20	250	Drilling
Japan Drlg/Hakuryu I	JU	13.63	5	Niigata NM4000	14	100	Drilling
Maersk Drlg/Maersk Endurer	JU	13.63	10	Olwl E2000	20	250	Drilling
Maersk Drlg/Maersk Viking	JU	13.63	10	Olwl E2000	20	300	Drilling
Magnum Marine/H L Cecil	JU	13.63	10	Sup 2000E	25	200	Drilling
Ocean Drlg & Expl/Ben Ocean Typhoon	DS	13.63	5	Nat 1320UE	25	600	Drilling
Ocean Drlg & Expl/Ocean Tide	JU	13.63	10	Nat 1320DE	25	300	Drilling
Penrod Drlg/85	JU	13.63	10	Nat 1320UE	25	250	Stacked
Saipem/Perro Negro 4	JU	13.63	5	Nat 110UE	16	150	Workover
Saipem/5834	P	14.00	5	Idco E2100	20		Drilling
Santa Fe Drlg/Santa Fe Mariner I	SS	16.75	5	Nat 1320UE	20	600	Drilling
Santa Fe Drlg/105	JU	21.25	5	Emsco C2	20	250	Drilling
Santa Fe Drlg/124	JU	13.63	5	Nat 1625DE	20	250	Drilling
Santa Fe Drlg/136	JU	13.63	10	Nat 1320UE	20	250	Drilling
Santa Fe Drlg/141	JU	13.63	10	Olwl E2000	20	250	Drilling
Sonat Interocean Drlg SA/[illegible]rocean III	JU	13.63	10	Nat 1320UE	20	307	Drilling
Sonat Offshore Drlg/Discove[illegible] I	T	12.00	3	Nat 808	12	600	Drilling
Sonat Offshore Drlg/Offshore Aquarius	JU	13.63	5	Olwl E2000	20	250	Drilling
Sonat Offshore Drlg/Offshore Comet	JU	13.63	10	Nat 1320UE	20	225	Drilling
Sonat Offshore Drlg/Offshore Mercury	JU	13.63	10	Nat 1320DE	20	250	Drilling
Sonat Offshore Drlg/Offshore Taurus	JU	13.63	10	MC U1220BE	20	250	Stacked
Western Oceanic/Western Triton I	JU	13.63	10	Nat 1320UE	20	250	Drilling
GABON							
Castor/Navifor III	T	16.75	5	Nat 1320UE	20	400	Drilling
Castor/Navifor Norse	DS	16.63	10	Nat 1320UE	20	600	Drilling
Foramer/Ile d'Ouessant	T	10.00	5	Idco H525	8	400	Stacked
Foramer/Ile de Re	T	16.75	5	Nat 1320DE	20	400	Stacked
Forex Neptune and/or Affil/Searex I	T	16.75	5	G-D 1100E	18	250	Stacked
Forex Neptune and/or Affil/Trident VII	JU	13.63	10	G-D 1500E	18	100	Standby
Global Marine Drlg/Glomar Adriatic I	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar High Island III	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar High Island V	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar Main Pass I	JU	13.63	10	Nat 1625DE	25	300	Drilling
Transworld Drlg/46	S	13.63	5	Emsco EDA480	30	70	Stacked
IVORY COAST							
J L Offshore/Dan Duke	JU	13.63	10	Nat 1320UE	30	300	Production
Reading & Bates/Douglas Carver	DS	20.00	10	Nat 1625DE	25	700	Drilling
Southeastern Drlg Serv/Sedco 135J	SS	21.25	2	Olwl E3000	25	600	Drilling
KENYA							
Western Offshore/IX	DS	16.75	10	Nat 1625DE	25	750	Drilling
LIBERIA							
Neddrill/Neddrill 1							Drilling
LIBYA							
Saipem/Perro Negro 3	JU	13.58	10	Idco E2100	21	300	Drilling
Saipem/Scarabeo 3	SS	18.75	10	Nat 1625	25	1300	Drilling
MOROCCO							
Sedco Inc/Sedco H	SS	18.75	10	Olwl 3000	20	600	Drilling
NIGERIA							
Forex Neptune and/or Affil/Belle Isle	B	13.63	5	Emsco 1500UE	18	22	Drilling
Forex Neptune and/or Affil/Lutece	B	13.63	5	Idco 2500E	20	22	Drilling
Forex Neptune and/or Affil/Trident VIII	JU	13.63	10	G-D 1500E	18	300	Drilling
Keydril/Key Bermuda	JU	13.63	10	Olwl 2000	20	280	Drilling
Santa Fe Drlg/Swamp Master	B	13.63	5	Idco 2500E	20	22	Drilling
Santa Fe Drlg/Swamp Queen	B	20.00	5	Nat 1320	20	22	Stacked
Western Offshore/Mr Sage	JU	13.63	5	Nat 1320UE	20	280	Drilling

AFRICA (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
SOMALIA							
Pacnorse Drlg SA/Pacnorse I	DS	16.75	10	Emsco C3	25	3000	Drilling
SOUTH AFRICA							
Foramer/Actinia	SS	18.75	10	Nat 1625	25	1500	Drilling
Sedco Maritime/Sedco 135K	SS	21.25	10	Olwl E3000	25	900	Drilling
TOGO							
Forex Neptune and/or Affil/Trident IV	JU	13.63	10	G-D 2100E	20	300	Drilling
TUNISIA							
Blocker Drlg & Marine/Trinity Bay	B	13.63	10	Idco E3000	30		Stacked
Global Marine Drlg/Glomar High Island VIII	JU	13.63	10	Nat 1320UE	20	250	Drilling
Keydril/Galveston Key	JU	13.63	10	Emsco C3 Type 2	30	300	Drilling
ZAIRE							
Keydril/Key Victoria	JU	13.63	5	Olwl E2000	25	280	Drilling

ASIA PACIFIC

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
AUSTRALIA							
Atwood Oceanics Pacific/Energy Searcher	DS	18.75	10	G-D 3000E	25/5"	1500	Drilling
Atwood Oceanics Pacific/Regional Endeavour	DS	18.75	10	Nat 1320UE	20/5"	1500	Drilling
Global Marine Drlg/Glomar Main Pass III	JU	13.63	10	Nat 1625DE	25	300	Drilling
Loffland Bros/95	P	13.63	5	MC U1220	20		Drilling
Maersk Drlg/Maersk Valiant	JU	13.63	10	Olwl E2000	20	300	Stacked
Ocean Drlg & Expl/Ocean Digger	SS	18.75	10	Emsco A1500	25	600	Stacked
Pool Australia/110	P			I-R 2042	7.5		Stacked
Richter Drlg Pty/10	P	13.63	5	Nat 110UE	18		Drilling
Richter Drlg Pty/12	P	13.63	5	Nat 110UE	16		Drilling
South Seas Drlg/Southern Cross	SS	18.75	10	Olwl E2000	20	1500	Drilling
BORNEO							
Foramer/Ile de Sein	T	16.75	5	Nat 1320DE	20	400	Drilling
Rowan Intl/Rowan Fairbanks	B	13.63	5	Nat 1320UE	25	20	Drilling
Rowan Intl/Rowan Morgan City	B	13.63	5	Nat 1320UE	25	20	Drilling
BRUNEI							
Reading & Bates/Harvey H Ward	JU	13.63	10	Nat 1625	25	300	Drilling
Reading & Bates/I J Pierce	PT	20.00	5	Olwl 840E	18		Drilling
Reading & Bates/J W Nickle	PT	20.00	5	Olwl 840E	18		Drilling
Sedco Inc/Sedco 135E	SS	20.00		Olwl 3000	25	600	Drilling
Southeastern Ocean Drlg/Sedco 135A	SS	13.63	5	Olwl 3000	25	600	Stacked
CHINA							
Atlantic Drlg/Benlomond	DS	18.75	10	Emsco C2	20/5"	750	Drilling
China Natl Offshore Oil Corp/Nan Hai II	SS	18.75	10	Emsco	25	1000	Drilling
Japan Drlg/Hakuryu III	SS	18.75	10	Emsco C3 Type II	35	1000	Drilling
Japan Drlg/Hakuryu 9	JU	13.63	10	Nat 1320UE	23.5	186	Drilling
JFP Well Serv/JFP Nine	JU	13.63	10	Olwl 840E	15	150	Stacked
Reading & Bates/Jim Cunningham	SS	18.75	10	Nat 1625DE	25	1500	Drilling
Sedco Inc/Sedco 600	SS	18.75	10	Emsco C2 Type II	20	1800	Drilling
Sedco Inc/Sedco 602	SS	18.75	10	Emsco C2 Type II	20	1800	Drilling
Western Offshore/VIII	DS	16.75	5	Nat 1625DE	25	600	Drilling
Zapata Offshore/Zapata Arctic (36)	SS	18.75	15	Emsco C3	25	2000	Drilling
INDIA							
Atwood Oceanics Pacific/Gettysburg	B	18.75	10	Nat 1320	20/5"	600	Drilling
Atwood Oceanics Pacific/Shenandoah	JU	13.63	10	Emsco C2	20/5"	300	Drilling
Dixilyn-Field Drlg/DF95	SS	18.75	10	Nat 1625DE	25	800	Drilling
Griffin-Alexander Drlg/G-A I	JU	13.63	10	MC EB1220	25	200	Drilling
Sedco Intl SA/Sedco 445	DS	16.75	10	Olwl E3000	25	3000	Drilling
Western Oceanic/Western Triton II	JU	13.63	10	Nat 1320	20	250	Drilling
Zapata Offshore/Miss Kitty (37)	JU	13.63	10	Nat 1625	25	300	Drilling
INDONESIA							
Atwood Oceanics Pacific/Chancellorsville	DS	18.75	10	Emsco C2	20/5"	1000	Drilling
Atwood Oceanics Pacific/Williamsburg	PT	13.63	5	Emsco C	20/5"	300	Stacked
Dual Drlg/Rig 38	JU	13.63	5	Olwl E2000	20	300	Drilling
Dual Drlg/Rig 42	JU	13.63	5	Olwl E2000	20	300	Drilling
Foramer/Alligator	T	13.63	5	Nat 110UE	20	400	Drilling
Foramer/Bintang K	B	13.63	10	Nat 1320	20	21	Drilling
Foramer/Ile d'Amsterdam	JU	13.63	10	Nat 1320UE	20	300	Drilling
Forex Neptune and/or Affil/Gavrinis (Rig 37)	B	13.63	5	Nat 110UE	18	25	Drilling
Forex Neptune and/or Affil/Izenah (Rig 38)	B	13.63	5	Nat 110UE	18	25	Drilling
Global Marine Drlg/Glomar Conception	DS	18.75	10	Nat 1625DE	25	600	Drilling
Global Marine Drlg/Glomar Grand Isle	DS	18.75	10	Nat 1625DE	25	600	Drilling
Global Marine Drlg/Glomar Robert F Bauer	DS	18.75	10	Nat 1625DE	25	2500	Drilling
Japan Drlg/Hakuryu IV	JU	13.63	10	Nat 1625DE	29	295	Drilling
Penrod Drlg/93	JU	13.63	10	Nat 1320UE	25	250	Drilling
Reading & Bates/Charley Graves	PT	20.00	10	Nat 1320UE	25		Drilling
Reading & Bates/Chris Seger	JU	29.50	10	Idco 2500	20	210	Drilling
Reading & Bates/D K McIntosh	JU	30.00	10	Nat 1320	20	250	Drilling
Reading & Bates/J W Bates	DS	20.00	10	Nat 1320UE	20	600	Drilling
Reading & Bates/J W McLean	JU	20.00	10	Nat 130	20	225	Drilling
Reading & Bates/W D Kent	P	13.63	5	Nat 1320UE	25		Drilling
Santa Fe Drlg/127	JU	13.63	5	Nat 1320UE	20	250	Drilling
Santa Fe Drlg/134	JU	21.25	10	Nat 1320UE	20	250	Drilling
Western Offshore/VII	B	16.75	5	G-D 2100RE	25	600	Drilling

ASIA PACIFIC (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
INDONESIA (Cont'd)							
Zapata Offshore/Enterprise (35)	JU			Emsco C3 Type II	20	200	Drilling
Zapata Offshore/Trader (21)	DS						Drilling
JAPAN							
Japan Drlg/Hakuryu II	SS	13.63	10	Emsco C3 Type II	35	656	Drilling
Japan Drlg/Hakuryu V	SS	18.75	10	Emsco C3 Type II	35	1640	Drilling
Sonat Offshore Drlg/Henry Goodrich							Under Construction
Sonat Offshore Drlg/Polar Pioneer							Under Construction
KOREA							
Golar-Nor Offshore AS/Norjarl	SS	18.75	15	Nat 1625DE	20/5"	2000	Under Construction
MALAYSIA							
Dolphin Titan Intl/140	T	13.63	10	Nat 1320UE	20	225	Drilling
Forex Neptune and/or Affil/Grand Large	T	13.63	5	G-D 1500UE	18	250	Drilling
Forex Neptune and/or Affil/Trident II	JU	13.63	10	G-D 2100RE	20	350	Drilling
Loffland Bros/46	P	13.63	5	MC U914CE	18		Stacked
Loffland Bros/47	P	13.63	5	MC U914	18		Stacked
Pool Australia/448	P			Idco H725	7.5		Drilling
Pool Australia/450	P			Idco 1700E	20		Drilling
Reading & Bates/D R Stewart	JU	13.63	10	Olwl E3000	25	300	Drilling
Santa Fe Drlg/Santa Fe Explorer	JU	20.00	5	MC U91[illegible]	15	160	Stacked
Sonat Offshore Drlg/Discoverer III	DS	18.75	10	Nat 1625	20	600	Drilling
NEW ZEALAND							
Diamond M/Epoch	SS	16.75	10	Olwl E3000	30	1200	Drilling
SINGAPORE							
Atwood Oceanics Pacific/Margie	SS	18.75	10	Nat 1320	20/5"	600	Stacked
Atwood Oceanics Pacific/Mission Viking	B	18.75	10	Nat 1625DE	2[illegible]/5"	700	Drilling
Blocker Drlg & Marine/Vermilion Bay	B	13.63	10		30		Stacked
Dolphin Titan Intl/143	T	13.63	10	Emsco A100E	20	150	Stacked
Foramer/Shiloh	T	13.63	5	Nat 1320DE	20	400	Stacked
Ocean Drlg & Expl/Ocean Hurricane	DS	16.75	10	Nat 1625	25	600	Stacked
TAIWAN							
J L Offshore/Dan Baron	DS	18.75	10	Idco E3000	20	1000	En Route
J L Offshore/Danwood Ice	DS	18.75	10	Nat 1320UE	20	1000	Drilling
THAILAND							
Great Eastern Drlg & Engrg/Eastern Princess	PT	13.63	5	Emsco C2	20	400	Drilling
Great Eastern Drlg & Engrg/Eastern Queen	PT	13.63	5	Emsco C2	20	400	Drilling
Great Eastern Drlg & Engrg/Seacrest	DS	18.75	10	Olwl E3000	25	1000	Drilling

CANADA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
UNDESIGNATED							
Sonat Offshore Drlg/John Shaw	SS	18.75	10	Emsco C3 Type II	25	1500	Drilling
NEWFOUNDLAND							
Bow Valley Offshore Drlg/Bow Drill 1	SS	13.63	15	G-D 3000E	25	1200	Drilling
Bow Valley Offshore Drlg/Bow Drill 2	SS	18.75	15	Nat 1625	/25	1500	Drilling
Bow Valley Offshore Drlg/Bow Drill 3	SS	18.75	15	Nat 1625	/25	1500	Drilling
NORTHWEST TERRITORIES							
Canadian Marine Drlg/Canmar Explorer I	DS	18.75	10	Idco 2100E	25/5"	600	Winter Layup
Canadian Marine Drlg/Canmar Explorer II	DS	18.75	10	Idco 2100E	25/5"	600	Winter Layup
Canadian Marine Drlg/Canmar Explorer III	DS	18.75	10	Nat 1625DE	25/5"	1500	Winter Layup
Canadian Marine Drlg/Canmar Explorer IV	DS	18.75	10	Emsco C3	20/5"	607	Winter Layup
Canadian Marine Drlg/Rig 1							Stacked
Canadian Marine Drlg/SSDC	S	13.63	10	Nat 1625	22		Winter Layup
NOVA SCOTIA							
Global Marine Drlg/Glomar Labrador I	JU	13.63	15	Nat 1625DE	25	300	Drilling
Marine Drlg SA/Sedco 709-Sexton	SS	16.75	10	Olwl E3000	25	6000	Drilling
Rowan Co/Gorilla III	JU	13.63	10	Nat 1625	25	328	Drilling
Rowan Co/Rowan Gorilla I	JU	13.63	10	Nat 1625UE	25	328	Drilling
Rowan Co/Rowan Juneaue	JU	13.63	15	Nat 1625	25	300	Drilling
Sedco Inc/Sedco 710	SS	13.63	15	Olwl E3000	25	5000	Drilling
Zapata Offshore/31 (Scotian)	JU	13.63	15	Nat 1625DE	25	200	Drilling
706 Drlg/Sedco 706	SS	18.75	10	Olwl E3000	25	1300	Drilling
ONTARIO							
Underwater Gas Dev/Mr Neil	P	10.00		Idco H525D	8/3-1/2"	80	Stacked
Underwater Gas Dev/Telesis	DS	8.00		Nat T20	5/3 1/2"	210	Drilling
Underwater Gas Dev/Timesaver II	P	8.00		Emsco GB250T	5/3 1/2"	100	Drilling

CENTRAL AMERICA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
BELIZE							
Keydril/Key Gibraltar	JU	13.63	10	Olwl E2000	25	300	Drilling

EUROPE

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
DENMARK							
J L Offshore/Dan Earl	JU	13.63	10	Nat 1320UE	20	205	Drilling
J L Offshore/Dan King	JU	13.63	10	Nat 1320UE	20	205	Drilling

EUROPE (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
DENMARK (Cont'd)							
Maersk Drlg/Maersk Endeavour	JU	13.63	10	Nat 1320UE	20	251	Drilling
Maersk Drlg/Maersk Explorer	JU	13.63	10	Nat 1320UE	25	205	Drilling
FRANCE							
Foramer/Pelican	DS	13.63	10	Nat 1625DE	25	1100	Stacked
GREECE							
Penrod Drlg/58	JU	13.63	10	Nat 1625DE	30	210	Stacked
IRELAND							
Southeastern Drlg Serv/Sedco 704	SS	18.75	10	Olwl 3000	25	1500	Under Repair
ITALY							
Foramer/Asterie	SS	18.75	10	G-D 3000	20	600	Drilling
Global Marine Drlg/Glomar Adriatic IV	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Biscay I	SS	18.75	10	Olwl E3000	25	1500	Drilling
Global Marine Drlg/Glomar Grand Banks	DS	18.75	10	Nat 1625DE	25	600	Drilling
Pool-Intairdril/446	P	13.63	5	OIME 1000	10		Drilling
Pool-Intairdril/447	P	13.63	5	OIME 1000	10		Stacked
Reading & Bates/Mr Jack	JU	20.00	10	Olwl E3000	25	300	Drilling
Reading & Bates/Roger W Mowell	JU	13.63	10	Nat 1625DE	25	300	Drilling
Reading & Bates/W B Tyson	JU	13.63	10	Nat 1625DE	25	300	Drilling
Saipem/Perro Negro	JU	13.63	10	Idco PE2500	21	130	Drilling
Saipem/Perro Negro 2	JU	13.58	10	Olwl E2000	21	300	Drilling
Saipem/Saipem Due	DS	16.75	5	Nat 1625	25	1500	Drilling
Saipem/Scarabeo 2	SS	18.75	10	Idco PE2500	21	600	Being Modified
Saipem/5853	P	11.00	10	Idco H525D	7		Drilling
Saipem/5890	P	13.58	10	Idco E2100	25		Drilling
MALTA							
Saipem/Scarabeo 4	SS	18.75	10	Nat 1625	25	1300	Drilling
Santa Fe Drlg/Mariner 2	SS	16.75	5	Nat 1320UE	20	600	Stacked
NETHERLANDS							
Deutsche Tiefbohr/T-38	P	11.00	10	Wils 75	13/ 3.5"		Workover
Deutsche Tiefbohr/T-39	P	13.63	3	Sup 400UE	6/ 3.5"		Workover
Dixilyn-Field Drlg/DF87	JU	13.63	10	Nat 1320UE	25	300	Drilling
Dyvi Offshore AS/Dyvi Epsilon	JU	13.63	10	Nat 1320UE	20	210	Drilling
Foramer/Platon	JU	13.63	10	Nat 1625	25	300	Drilling
Global Marine Drlg/Glomar Adriatic III	JU	13.63	10	Nat 1625DE	25	300	Drilling
Neddrill/Neddrill 3	JU	13.63	10	Emsco C3	20	210	Drilling
Neddrill/Neddrill 4	JU	13.63	10	Emsco C3	20	165	Drilling
Penrod Drlg/64	JU	13.63	10	Nat 1625DE	30	210	Drilling
Penrod Drlg/67	JU	13.63	10	Nat 1625DE	30	210	Drilling
Penrod Drlg/80	JU	13.63	10	Nat UE	30	210	Drilling
Penrod Drlg/81	JU	13.63	10	Nat 1320UE	25	210	Drilling
Penrod Drlg/85	JU	13.63	10	Nat 1320UE	25	250	Drilling
Reading & Bates/F G McClintock	JU	20.00	10	Olwl E3000	25	300	Drilling
Reading & Bates/Ron Tappmeyer	JU	13.63	10	Olwl E3000	20	300	Drilling
Rowan Co/Rowan Halifax	JU	13.63	10	Nat 1625UE	25	300	Drilling
Transocean Drlg/Transocean 1	JU	11.00	10	Emsco A1500E	20	140	Drilling
Transocean Drlg/Transocean 4	JU	13.63	10	Nat 1320UE	25	160	Drilling
Zapata Offshore/Nordic (19)	JU	13.63	10	Emsco C3 Type II	20	300	Drilling
NORWAY							
Dyvi Offshore AS/Dyvi Beta	JU	13.63	10	Nat 1320UE	20	350	Drilling
Dyvi Offshore AS/Dyvi Delta	SS	18.75	10	Olwl E3000	25	1500	Drilling
Dyvi Offshore AS/Dyvi Stena	SS	18.75	15	Emsco C3	25	200	Drilling
Global Marine Drlg/Moray Firth I	JU	13.63	15	Nat 1625DE	25	300	Drilling
Golar-Nor Offshore AS/Nortrym	SS	18.75	10	Nat 1625DE	25/5"	1250	Drilling
Intl Chandlers/Sedco SPSS	SS					1500	Support
Morco AS/7/11 COD-46	P	13.63	5	Idco E2100			Drilling
Morco AS/1/6 Alpha-04	P	13.63	10	Nat 1320UE	20		Drilling
Morco AS/2/4 Alpha-44	P	13.63	5	Emsco A1500E			Drilling
Morco AS/2/4 Bravo-43	P	13.63	5	Emsco A1500E			Drilling
Morco AS/2/4 Delta-45	P	13.63	5	Emsco C2			Drilling
Morco AS/2/4 E Tor-47	P	13.63	5	Emsco C3			Drilling
Morco AS/2/7 Alpha-32	P	13.63	5	Nat 110UE			Drilling
Morco AS/2/7 Bravo-49	P	13.63	5	MC U1220EB			Drilling
Morco AS/2/4 Charlie-42	P	13.63	5	Olwl 940E			Drilling
Morco AS/2/4 Foxtrott-03	P	13.63	10	Nat 1320UE			Drilling
Neddrill/Neddrill Trigon	JU	13.63	15	Nat 1625DE	25	360	Drilling
Odfjell Drlg & Consulting/Deepsea Bergen	SS	18.75	10	Nat 1625DE	30	1500	Completion
Odfjell Drlg & Consulting/101	P	13.63	5	Nat 1320UE	20	475	Drilling
Ross Drlg/Ross Isle	SS	18.75	10	Olwl E3000	25	1500	Drilling
Smedvig Drlg/West Vanguard	SS	18.75	10	Emsco 3000	25	1500	Drilling
Smedvig Drlg/West Venture	SS	18.75	10	Emsco 3C	25	1200	Drilling
Wilh Wilhelmsen/Treasure Hunter	T						Tender Support
Wilh Wilhelmsen/Treasure Saga	SS				25	1500	Drilling
Wilh Wilhelmsen/Treasure Scout	SS			MC U1220EB	25	1500	Drilling
Wilh Wilhelmsen/Treasure Seeker SS	SS		15	Emsco C3 Type II	25	1250	Drilling
Wilh Wilhelmsen/Treasure Supporter	T					600	Accom
PORTUGAL							
Neddrill/Neddrill 2							Drilling
Sea Drlg Netherlands/Sedneth I	SS	16.75	5	Olwl E3000	20	600	Stacked
Sedco Inc/Sedco 150	JU	13.63	5	Emsco A800RE	10	150	Stacked
Sedco Inc/Sedco 252	JU	13.63	10	Olwl E2000	20	250	Stacked
Sedco Inc/Sedco 253	JU	13.63	10	Emsco C2	20	250	Stacked
SPAIN							
Foramer/Petrel	DS	16.75	10	Nat 1625DE	25	2500	Drilling
Jebsens Drlg/Ali Baba	SS	18.75	10	Nat 1625DE	25	1000	Drilling
KCA Drlg/Polly Bristol	DS	18.75	10	Nat 1625DE	25	4500	Drilling
Ocean Drlg & Expl/Ocean Voyager	SS	18.75	10	Emsco C3 Type II	25	1250	Drilling
Ocean Drlg Serv/Sedco 601	SS	18.75	10	Emsco C2	20	1500	Maintenance

EUROPE (Cont'd)

UNITED KINGDOM

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atlantic Drlg/Bendoran	SS	21.25	2	Nat 1625DE	25/5"	680	Drilling
Atlantic Drlg/Benreoch	SS	18.75	15	Nat 1625DE	25/5"	1500	Drilling
Atlantic Drlg/Benvrackie	SS	21.25	2	Nat 1625DE	25/5"	680	Drilling
Atlantic Drlg/Ocean Benloyal	SS	13.63	10	Nat 1625DE	25/5"	680	Drilling
Bawden Drlg/32	P	10.00	3	Olwl 700	9		Drilling
Bawden Drlg/34	P	13.63	5	Nat 1320UE	22		Drilling
Bawden Drlg/35	P	16.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/39	P	13.63	5	Nat 1320UE	22		Drilling
Bawden Drlg/40	P	13.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/41	P	13.63	5	Nat 1320UE	20		Drilling
Bawden Drlg/42	P	13.63	5	Nat 1320UE	22/5"		Drilling
Bawden Drlg/43							Drilling
Bawden Drlg/44							Drilling
Bawden Drlg/45							Workover
Bawden Drlg/46							Workover
British Gas Corp/Morcambe Flame	JU	13.63	5	Nat 80UE		150	Drilling
Deutsche Tiefbohr/T-20	P	13.63	10	Nat 1320UE	18	480	Workover
Deutsche Tiefbohr/T-21	P	13.63	10	Nat 1320UE	18	460	Drilling
Deutsche Tiefbohr/T-25	P	13.63	10	Nat 1320UE	18	510	Drilling
Dixilyn-Field Drlg/DF96	SS	18.75	10	Nat 1625DE	25	1200	Stacked
Dixilyn-Field Drlg/DF97	SS	18.75	10	Emsco C1112	25	1200	Drilling
Dyvi Offshore AS/Dyvi Gamma	JU	13.63	10	Nat 1320UE	20	350	Accom
Dyvi Offshore AS/Dyvi Omega	SS	18.75	10	Olwl E3000	25	1500	Drilling
Dyvi Offshore AS/Dyvi Sigma	JU	13.63	10	Nat 1320UE	20	210	Drilling
Forex Neptune and/or Affil/Drill Star	SS	18.75	15	Nat 1625DE	25	1500	Drilling
Forex Neptune and/or Affil/Pentagone 84	SS	13.63	10	G-D 3000E	25	1050	Drilling
Forex Neptune and/or Affil/Trident X	JU	21.25	2	Nat 1625DE	25	300	Drilling
Forex Neptune and/or Affil/Trident XI	JU	21.25	2	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Biscay II	SS	18.75	10	Nat 1625DE	25	600	Drilling
Houlder Marine Drlg/Bay Driller	JU	18.63	5	Nat 80UE	10	200	Accom
Houlder Marine Drlg/High Seas Driller	SS	18.75	15	Nat 1625E	25/5"	1500	Drilling
Houlder Marine Drlg/Shelf Driller	JU	13.63	10	Nat 1625E	25/5"	300	Drilling
Jebsens Drlg/Aladdin	SS	21.25	2	Olwl E3000	25	600	Drilling
Jebsens Drlg/Sinbad Saxon	SS	13.63	10	Olwl E3000	25	600	Drilling
Kingsnorth Marine/Dundee Kingsnorth	SS	18.75	10	Nat 1625DE	24		Drilling
Kingsnorth Marine/Kingsnorth UK	SS	18.75	10	Nat 1625DE	24		Drilling
KCA Drlg/51	P	13.63	5	Nat 1320UE	20		Drilling
KCA Drlg/52	P	13.63	5	Nat 1320UE	20		Drilling
KCA Drlg/53	P	13.63	5	Nat 1320UE	20		Drilling
Loffland Bros/43	P	13.63	10	Idco E3000	20		Drilling
Loffland Bros/81	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/82	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/83	P	13.63	5	MC U1220EB	20		Drilling
Loffland Bros/84	P	13.63	5	MC U1220EB	20		Drilling
Ocean Drlg & Expl/Benloyal	SS	13.63	10	Nat 1625		1100	Drilling
Ocean Drlg & Expl/Ocean Bounty	SS	16.75	10	Emsco C3 Type II	25	1200	Drilling
Ocean Drlg & Expl/Ocean Kokuei	SS	13.63	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Ocean Liberator	SS	18.75	10	Nat 1625DE	25	1000	Drilling
Ocean Drlg & Expl/Ocean Nomad	SS	18.75	10	Nat 1625	25	1200	Drilling
Ocean Drlg & Expl/Ocean Victory	SS	13.63	10	Emsco C3 Type II	25	600	Stacked
Odfjell Drlg & Consulting/Deepsea Pioneer	SS	18.75	10	Nat 1625DE	30	1500	Production
Penrod Drlg/92	JU	13.63	10	Nat 1320UE	25	220	Drilling
Reading & Bates/M G Hulme Jr	SS	18.75	10	Nat 1625	25	1500	Drilling
Rowan Co/Gorilla II	JU	13.63	10	Nat 1625UE	25	328	Stacked
Rowan Co/Rowan California	JU	13.63	10	Nat 1625UE	25	300	Drilling
Rowan Intl/Arch Rowan	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Cecil Provine	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Charles Rowan	JU	13.63	10	Nat 1625	25	300	Drilling
Rowan Intl/Gilbert Rowe	JU	13.63	10	Nat 1625	25	300	Drilling
Santa Fe Drlg/Britannia	JU	20.00	10	Nat 1320DE	20	160	Drilling
Santa Fe Drlg/82	P	20.00	5	Nat 1320UE	20		Drilling
Santa Fe Drlg/111	P	21.75	5	Olwl 3000E	20		Drilling
Santa Fe Drlg/135	SS	18.75	15	Olwl E3000	25	1500	Drilling
Santa Fe Drlg/140	SS	18.75	15	Olwl E3000	25	1500	Drilling
Sea Drlg Netherlands/Sedneth 701	SS	18.75	15	Olwl E3000	25	2000	Drilling
Sedco Inc/Sedco 711	SS	13.63	15	Olwl E3000	25	1500	Drilling
Sedco Inc/Sedco 714	SS	18.75	15	Olwl E3000	25	1500	Drilling
Sonat Interocean Drlg SA/Interocean II	JU	13.63	10	Emsco C2	20	307	Drilling
Sonat Offshore Drlg/Chris Chenery	SS	18.75	10	Nat 1625DE	20	600	Drilling
Southeastern Drlg Serv/Sedco 700	SS	21.25	10	Olwl E3000	25	1500	Drilling
Southeastern Drlg Serv/Sedco 703	SS	18.75	10	Olwl 3000	25	2000	Drilling
Southeastern Drlg Serv/Sedco 707	SS	21.25	2	Olwl E3000	25	2000	Drilling
Transocean Drlg/Transocean 6	JU	13.63	10	Emsco C3 Type II	20	300	Drilling
Transworld Drlg/58	SS			Emsco C3000	25	600	Production
Western Oceanic/Apollo I	JU	13.63	10	Emsco C3	20	300	Drilling
Western Oceanic/Apollo II	JU	13.58	10	Emsco C3	20	300	Drilling
Western Oceanic/Western Pacesetter I	SS	18.75		Nat 1625DE	25	600	Drilling
Western Oceanic/Western Pacesetter II	SS	18.75	10	Nat 1625DE	25	1200	Drilling
Western Oceanic/Western Pacesetter IV	SS	18.75	10	Emsco C3 Type II	25	1500	Drilling
Wilh Wilhelmsen/Treasure Finder	T					1000	Accom
Wilh Wilhelmsen/Treasure Swan	SS					2500	Drilling

WEST GERMANY

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Deutsche Tiefbohr/T-24	P	13.63	10	Nat 80BUE	13		Stacked
Transocean Drlg/Transocean 2	JU	13.63	10	Nat 1625DE	20	150	Stacked
Transocean Drlg/Transocean 7	JU	13.63	10	Emsco C3 Type II	25	300	Stacked

MIDDLE EAST

QATAR

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Forex Neptune and/or Affil/Trident VI	JU	13.63	10	G-D 1500E	18	300	Drilling
Santa Fe Drlg/103	JU	20.00	5	Emsco C2	20	250	Drilling

MIDDLE EAST (Cont'd)

SAUDI ARABIA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Arabian Drlg/Arabdrill 11							Workover
Arabian Drlg/Arabdrill 8	JU	13.63	5	Nat 110UE	20	150	Drilling
Loffland Bros/Ocean Master V	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VI	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VII	JU			MC U914EC	18	160	Drilling
Loffland Bros/Ocean Master VIII	JU			MC U914EC	18	160	Drilling
Loffland Bros/Oceanmaster III	JU	13.66	3	MC U712A	14	160	Stacked
Loffland Bros/Orville Fisher	P	13.63	5	MC U914C	18	160	Stacked
Maersk Drlg/Maersk Venturer	JU	13.63	10	Olwl E2000	20	300	Drilling
Maersk Drlg/Maersk Voyager	JU	13.63	10	Olwl E2000	20	300	Drilling
Pool Arabia/142	JU	13.63	5	Nat 80B	12	150	Stacked
Pool Arabia/143	JU	10.00	5	OIME 1000	12.5	160	Stacked
Pool Arabia/144	JU	13.63	5	OIME 1000E	10	160	Stacked
Pool Arabia/145	JU	13.63	5	Idco ED1200	13	160	Drilling

UNITED ARAB EMIRATES

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Atwood Oceanics Pacific/Bull Run	T	13.63	5	Nat 1320UE	20/5"	400	Drilling
Foramer/Ile de France	JU	13.63	5	Nat 1625DE	25	200	Drilling
Foramer/Tourmalines	JU	10.00	5	Nat 80B	12	150	Stacked
Forex Neptune and/or Affil/Trident III	JU	13.63	5	G-D 2100E	20	300	Drilling
Forex Neptune and/or Affil/Trident V	JU	10.00	5	Idco E900	10	150	Stacked
Japan Drlg/Hakuryu VI	JU	13.63	5	Nat 1320UE	23.5	180	Drilling
Japan Drlg/Hakuryu VII	JU	13.63	10	Nat 1320UE	23.5	188	Drilling
Japan Drlg/Hakuryu 8	JU	13.63	10	Nat 1320UE	23.5	188	Drilling
Loffland Bros/Ocean Master IV	JU	13.66	3	MC U914	18	110	Drilling
Maersk Drlg/Maersk Vanguard	JU	13.63	10	Olwl E2000	20	300	Drilling
Maersk Drlg/Maersk Victory	JU	13.63	10	Olwl E2000	20	300	Drilling
National Drlg/Al Ghallan	JU	13.63	5	Nat 1320UE	20	120	Under Repair
National Drlg/Al Ittihad	JU	13.63	10	Nat 1320UE	20	150	Drilling
National Drlg/Al Yasat	JU	13.63	5	Nat 1320UE	20	170	Drilling
National Drlg/Diyina	JU	13.63	5	Nat 1320UE	20	170	Drilling
National Drlg/Junana	JU	13.63	10	Nat 1320UE	20	140	Drilling
National Drlg/Yemilah	JU	13.63	10	Nat 1320UE	20/5"	220	Drilling
Ocean Drlg Serv/Sedco 180	JU	13.63	10	Emsco C2	25	180	Drilling
Ocean Drlg Serv/Sedco 75	JU	13.63	5	Olwl 96	16	100	Drilling
Ocean Drlg Serv/Sedneth II	JU	13.63	10	Olwl 3000E	25	200	Drilling
Ocean Drlg Serv/Sedneth 201	JU	13.63	10	Emsco C2	25	200	Drilling
Ocean Drlg Serv/Sedneth 202	JU	13.63	10	Emsco C2	25	200	Drilling
Penrod Drlg/56	JU	13.63	10	Nat 1625DE	30	150	Stacked
Penrod Drlg/57	JU	13.63	10	Nat 1625DE	30	150	Stacked
Reading & Bates/W T Adams	JU	13.63	10	Nat 1525E	25	300	Drilling
Sedco Inc/Sedco 160	JU				20	160	Drilling
Sonat Offshore Drlg/Enterprise	JU	18.63	2	Nat 130		120	Maintenance
Sonat Offshore Drlg/Hustler	JU	12.00	5	Emsco A550	10	90	Drilling
Sonat Offshore Drlg/Jubilee	JU	13.63	5	Emsco A1500E	20	225	Stacked
Sonat Offshore Drlg/North Star	JU	13.63	5	Nat 1320DE	20	200	Stacked
Sonat Offshore Drlg/Offshore Antares	JU	13.38	5	Nat 130	15	115	Drilling
Sonat Offshore Drlg/Offshore Bahram	JU	13.63	5	Idco ED1200	20	200	Stacked
Sonat Offshore Drlg/Offshore Jupiter	JU	13.63	5	Emsco C1 Type II	16	130	Drilling
Transocean Drlg/Transocean 5	JU	13.63	10	Nat 1625	25	300	Drilling
Western Oceanic/Apollo III	JU	13.63	10	Emsco C3II	20	300	Drilling
Western Oceanic/Apollo IV	JU	13.63	10	Emsco C350	20	400	Drilling
Zapata Offshore/Bonito II (38)	JU	13.63	10	Nat 1625	25	300	Drilling
Zapata Offshore/Chaparral (9)	JU	13.63	10	Olwl 3000E	25	240	Stacked
Zapata Offshore/Heron (10)	JU	13.63	10	Nat 1625DE	25	300	Production
Zapata Offshore/Topper II (23)	JU	13.63	5	Nat 110UE	16.5	115	Stacked
Zapata Offshore/33 Soverign	JU	13.63	10	Nat 1320	20	250	Drilling

YEMEN

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Foramer/Nymphea	SS	18.75	10	Nat 1625	25	1500	Drilling

SOUTH AMERICA

ARGENTINA

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Reading & Bates/George H Galloway	JU	13.63	10	Nat 1625DE	25	300	Under Construction
Rio Colorado S A/Rio Colorado I	JU	13.63	5	Nat 1320UE	20	300	Stacked

BRAZIL

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
Dolphin Titan Intl/141	P	13.63	5	U1220EB	25	300	Drilling
Dolphin Titan Intl/142	PT	13.63	10	Emsco A1500	20	250	Stacked
Foramer/Pelerin	DS	16.75	10	Nat 1625	25	3300	Drilling
JFP Well Serv/JFP Seven	JU	13.63	1	Olwl E2000	25/5"	300	Drilling
Keydrill/Key West	JU	13.63	10	Emsco C3 Type 2	30	350	Drilling
Maersk Drlg/Maersk Pioneer	SS	18.75	10	Emsco C2 Type II	20	600	Drilling
Marlin Drlg/Marlin 14	JU	13.63	1	Nat 1625DE	25	150	Drilling
Montreal Engenharia/Montreal III	JU	13.38	10	Nat 1320UE	21	250	Drilling
Montreal Engenharia/Montreal IV	JU	13.38	10	Nat 1625DE	25	300	Drilling
Ocean Drlg & Expl/Ocean Cyclone	DS	16.75	5	Nat 1625	25	600	Drilling
Ocean Drlg & Expl/Ocean Zephyr	SS	21.25	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Zephyr II	SS	21.25	10	Nat 1623	25	600	Drilling
Odebrecht Perfuracoes/Itapoa	T					25	Drilling
Odebrecht Perfuracoes/Norbe I	JU	13.63	10	Nat 1320UE	25	300	Drilling
Odebrecht Perfuracoes/Piata	T					25	Drilling
Penrod Drlg/62	JU	13.63	10	Nat 1625DE	30	330	Production
Penrod Drlg/71	SS	13.63	10	Nat 1625	30	1000	Production
Sedco Inc/Sedco 135F	SS	13.63	10	Olwl E3000	25	600	Production
Sedco Intl SA/Sedco 135D	SS	16.75	5	Olwl 3000E	25	800	Production
Sedco Maritime/Staflo	SS	13.63	5	Nat 1625DE	20	600	Production
Sonat Interocean Drlg SA/Interocean Discoverer	DS	18.75	10	Emsco C2 Type II	20	1500	Drilling
Sonat Offshore Drlg/Orion	JU	13.63	10	Nat 1320DE	20	275	Production
Transworld Drlg/61	SS	13.63	10	Emsco A1500E	20	600	Production
Triangle Drlg/Norbe II	JU	13.63	10	Olwl 3000E	25	300	Drilling
Triangle Drlg/Norbe III	JU	13.63	10	Nat 1625UE	25	290	Drilling
Tropic Shipping Ent/DS Taineron	DS	18.75	10	Nat 1320UE	30	1000	Drilling

SOUTH AMERICA (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
CHILE							
Diamond M/Magallanes	JU	13.63	5	Oilwl E2000	20	150	Drilling
Diamond M/Nugget	JU	13.63	5	Oilwl E3000	30	300	Drilling
TRINIDAD & TOBAGO							
Dolphin Titan Intl/130	P	13.63	10	G-D 2100E	25		Drilling
Pool Santana/418	P	10.00	5	OIME	6		Drilling
Santa Fe Drlg/Bluewater No 3	SS	16.75	10	Nat 1625DE	25	600	Stacked
Skinner Marine/Skinner I	P	13.63	10	Oilwl E2000	20	185	Stacked
Skinner Marine/Skinner IV	P	13.63	5	Oilwl 840E	16	185	Stacked
Skinner Marine/Skinner V	P	13.63	5	Oilwl 760E	12		Stacked
Skinner Marine/Skinner VI	P	13.63	5	Oilwl 760E	12	185	Drilling
Skinner Marine/Skinner VII	P	13.63	5	Oilwl 840E	16	88	Drilling
Skinner Marine/7		7.06	3	Idco H20	3.5		Stacked
Skinner Marine/14		7.06	3	Idco H25	4		Stacked
Well Services/6	P	13.63	6	Nat 80B	12		Stacked
Well Services/7	P	13.63	6	S/B 4210	8		Stacked
VENEZUELA							
Loffland Bros/R-71	B			Idco H25			Drilling
Loffland Bros/V-101	B	6.00	5	Idco 711	10		Stacked
Loffland Bros/V-105	B	10.00	5	MC U914B	18		Drilling
Loffland Bros/V-114	B	10.00	5	MC U914C	18		Drilling
Santa Fe Drlg/Orinoco I	B	21.25	10	Oilwl E2000	20	20	Stacked
Santa Fe Drlg/Reina Del Lago	B	12.00	3	Nat 80E	14	100	Drilling
Santa Fe Drlg/Rey Del Lago	B	12.00	3	Nat 80E	14	100	Drilling

UNITED STATES

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
ALABAMA-UNDESIGNATED							
Global Marine Drlg/Glomar High Island IV	JU	13.63	10	Nat 1320UE	20	250	Drilling
ALABAMA-MOBILE BAY							
Atwood Oceanics Pacific/Vicksburg	JU	13.63	10	Emsco C2	20/5"	300	Drilling
Chiles Drlg/Seabee	JU	13.63	10	Nat 1625DE	25	250	Drilling
Penrod Drlg/94	JU	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/203	S	13.63	10	Nat 1320UE	25		Drilling
ALASKA-UNDESIGNATED							
Ocean Drlg & Expl/Ocean Odyssey	SS	18.75	15	Emsco C3		1500	Drilling
Parker Drlg/217							
Rowan Co/Rowan Middletown	JU	13.63	10	Nat 1625		300	Stacked
Sedco Inc/Sedco 712	SS	18.75	10	Oilwl E3000	25	1500	Drilling
Sedco Maritime/Sedco 708	SS	18.75	10	Oilwl E3000	25	2000	Drilling
ALASKA-SEWARD							
Keydril/Key Hawaii	JU	13.63	10	Nat 1625DE	25	300	Stacked
CALIFORNIA-UNDESIGNATED							
Diamond M/Eagle	SS	18.75	10	Oilwl E3000	30	2000	Drilling
Diamond M/Falcon	SS	18.75	10	Oilwl E3000	30	2000	Drilling
Diamond M/General	SS	18.75	10	Oilwl E3000	30	1200	Drilling
Global Marine Drlg/Glomar Atlantic	DS	18.75	10	Nat 1625DE	25	2000	Drilling
Global Marine Drlg/Glomar Pacific	DS	16.75	10	Nat 1625DE	25	2000	Drilling
Global Marine Drlg/Glomar Platform I	P	13.63	5	Nat 110UE	16		Drilling
Global Marine Drlg/Glomar Platform II	P	13.63	5	Nat 110UE	16		Drilling
JFP Well Serv/JFP Eleven	JU	13.38	10	Oilwl E2000	30/5"	350	Drilling
JFP Well Serv/JFP Three	JU	13.63	10	Oilwl E2000	25	300	Drilling
CALIFORNIA-SAN PEDRO							
Rowan Co/Rowan-Alaska	JU	13.63	10	Nat 1625DE	30	350	Stacked
CALIFORNIA-SANTA BARBARA							
Challenger Drlg/#30 EOS				Nat 1320DE	22		Stacked
Keydril/Key Singapore	JU	13.63	10	Nat 1625DE	25	300	Drilling
Penrod Drlg/96	JU	13.63	10	Nat 1320UE	25		Drilling
CALIFORNIA-SANTA BARBARA CHNL							
Western Offshore/XI							Workover
LOUISIANA-UNDESIGNATED							
Atlantic Pacific Marine/Gulf Commander	JU	13.63	5	Emsco A800WE	14	100	Support
Atwood Oceanics Pacific/Richmond	S	13.63	10	Nat 1320UE	20/5"	70	Stacked
CRC Mallard/43	P	10.00		Wils 65	14		Workover
CRC Mallard/45	P	10.00		Wils 65	8		Workover
Diamond M/Century	SS	18.75	10	Oilwl E3000	30	600	Drilling
Diamond M/Don E McMahon	JU	13.63	10	Oilwl E2000	25	100	Drilling
Diamond M/Gem	JU	13.63	10	Oilwl E3000	30	300	Drilling
Diamond M/Hunter	SS	18.75	10	Oilwl E3000	30	1500	Drilling
Diamond M/New Era	SS	18.75	10	Oilwl E3000	30	1200	Drilling
Diamond M/16	B	13.63	10	Idco E2500	25	12	Drilling
Diamond M/44	B	13.63	5	Oilwl E3000	25	18	Stacked
Diamond M/45	B	13.63	10	Oilwl E3000	25	18	Stacked
Diamond M/46	B	13.63	10	Oilwl E3000	30	20	Drilling
Diamond M/47	B	13.63	10	Oilwl E3000	30	20	Drilling
Dolphin Titan Intl/102	JU	6.00	5	Idco H35D	15	70	Workover
Dolphin Titan Intl/103	JU	10.00	5	Idco H35D	15	70	Workover
Dolphin Titan Intl/105	JU	10.00	10	Nat 610	20	100	Workover
Dolphin Titan Intl/106	JU	10.00	10	Nat 610	20	100	Stacked
Dolphin Titan Intl/128	P	13.63	10	Emsco C3 Type II	25		Drilling
Dolphin Titan Intl/129	P	13.63	10	Emsco C3 Type II	25		Drilling
Forex Neptune and/or Affil/Pentagone 82	SS	13.63	10	Emsco C3UE	25	1050	Drilling
Global Marine Drlg/Glomar Coral Sea	DS	18.75	10	Nat 1625DE	25	1500	Drilling
Global Marine Drlg/Glomar High Island I	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar High Island IX	JU	13.63	10	Nat 1320	20	250	Drilling
Global Marine Drlg/Glomar High Island VI	JU	13.63	10	Nat 1320UE	20	250	Drilling

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
LOUISIANA-UNDESIGNATED (Cont'd)							
Global Marine Drlg/Glomar High Island VII	JU	13.63	10	Nat 1320UE	20	250	Drilling
Global Marine Drlg/Glomar Main Pass II	JU	13.63	10	Nat 1625DE	25	300	Drilling
Global Marine Drlg/Glomar Main Pass IV	JU	13.63	10	Nat 1625DE	25	300	Drilling
Goldrus Marine Drlg/1	B	13.63	10	Oilwl 3000E	30	20	Drilling
Helmerich & Payne Intl Drlg/90	P	13.63	5	Oilwl E2000	20		Drilling
Helmerich & Payne Intl Drlg/91	P	13.63	5	Oilwl 2000	20		Stacked
Helmerich & Payne Intl Drlg/101	P	13.63	5	Nat 110UE	20		Drilling
Houston Offshore Intl/Sabine III	JU	13.63	10	Nat 1320UE	20	200	Standby
Marine Drlg/J Storm I	JU	13.63	10	Nat 130	20	225	Drilling
Marine Drlg/J Storm IV	JU	13.63	10	Nat 1625M	25	250	Drilling
Marine Drlg/J Storm VII	JU	13.63	10	Nat 1625M	25	377	Drilling
Marine Drlg/J Storm XI	JU	13.63	10	Nat 1320	20	200	Drilling
Marine Drlg/J Storm XVII	JU	13.63	10	Nat 1320M	20	250	Drilling
Marlin Drlg/Marlin 17							Drilling
Marlin Drlg/1	PT	13.63	5	Nat 1320DE	20		Stacked
Marlin Drlg/2	P	13.63	5	Nat 1320DE	20		Stacked
Marlin Drlg/10	P	11.00	10	Nat 610E	10		Stacked
Noble Drlg/PB-2	B			Oilwl E3000	25		Stacked
Noble Drlg/24	P	13.63	10	Nat 1625DE	25		Stacked
Noble Drlg/27	P	13.63	10	G-D 1100E	18		Stacked
Noble Drlg/30	P	13.63	10	G-D 1500E	20		Stacked
Noble Drlg/31	P			Oilwl E2000	20		Stacked
Ocean Drlg & Expl/Barge A	S	14.00	5	Idco 2500	25	70	Drilling
Ocean Drlg & Expl/Ben Ocean Lancer	DS	16.75	10	G-D 3000E	25	3000	Drilling
Ocean Drlg & Expl/Gulftide	JU	13.63	10	Nat 1625DE	25	250	Drilling
Ocean Drlg & Expl/John Hayward	S	10.00	5	Emsco EDA	25	30	Drilling
Ocean Drlg & Expl/Mr Charlie	S	13.63	5	Emsco EDES	25	40	Drilling
Ocean Drlg & Expl/Ocean Conquest	JU	13.63	10	Emsco C2	25	250	Drilling
Ocean Drlg & Expl/Ocean Endeavour	SS	18.75	10	Emsco C3 Type II	25	1000	Drilling
Ocean Drlg & Expl/Ocean Explorer	SS	13.63	5	Emsco EDES	25	600	Stacked
Ocean Drlg & Expl/Ocean King	JU	13.63	10	Nat 1625	25	300	Drilling
Ocean Drlg & Expl/Ocean Patriot	JU	13.63	10	Nat 1320ME	25	152	Drilling
Ocean Drlg & Expl/Ocean Pride	JU	13.63	5	Nat 110	25	152	Drilling
Ocean Drlg & Expl/Ocean Prospector	SS	18.75	10	Emsco C3 Type II	25	1000	Drilling
Ocean Drlg & Expl/Ocean Queen	SS	13.63	5	Emsco A1500	25	1200	Stacked
Ocean Drlg & Expl/Ocean Rover	SS	13.65	10	Emsco C3 Type II	25	600	Drilling
Ocean Drlg & Expl/Ocean Star	JU	13.63	5	Nat 1320UE	25	173	Drilling
Ocean Drlg & Expl/Ocean Tempest	DS	16.75	10	Nat 1625DE	25	600	Stacked
Ocean Drlg & Expl/Ocean Traveler	SS	13.63	10	Nat 1625DE	25	600	Drilling
Ocean Drlg & Expl/Ocean Viking	SS	13.63	10	Emsco A1500	25	600	Drilling
Ocean Drlg & Expl/St Louis	S	13.63	5	Emsco EDES	25	30	Stacked
Pool Offshore/453	P	13.63	5	OIME 1500	16		Stacked
Pool Offshore/454	P	13.63	10	OIME 1500	16		Stacked
Pool Offshore/455	P	13.63	5	OIME 1500	16		Under Construction
Pool Offshore Serv/11	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/16	P	2.50	5	Wils Super			Stacked
Pool Offshore Serv/20	B	2.50	5	Wils Super 38		10	Stacked
Pool Offshore Serv/40	P	4.16	10	Hydra LHD135T			Stacked
Pool Offshore Serv/41	P	4.16	10	Hydra LHD135T			Stacked
Quarles Drlg/23	B	13.63	10	Oilwl E3000	30	20	Drilling
Rowan Intl/4	B	13.63	10	Nat 1625DE	30	22	Stacked
Sedco Inc/Sedco 472	DS	16.75	10	Oilwl E3000	25	6000	Drilling
Sedco Maritime/Sedco 702	SS	21.25	10	Oilwl E3000	25	1200	Drilling
Sonat Offshore Drlg/Discoverer 511	DS	18.75	10	Idco E2100	20	2000	Drilling
Sonat Offshore Drlg/Discoverer 534	DS	16.75	10	Nat 1625DE	20	3000	Drilling
Sonat Offshore Drlg/Discoverer Seven Seas	DS	16.75	10	Emsco C3 Type II	25	7500	Drilling
Sonat Offshore Drlg/Offshore Pegasus	JU	13.38	10	Nat 110	16	125	Drilling
Transworld Drlg/44	S	13.63	5	Idco 1350S	18	40	Drilling
Transworld Drlg/47	S	13.63	10	Emsco A1500E	20	70	Drilling
Transworld Drlg/54	S	13.63	5	Emsco B3661	20	175	Drilling
Transworld Drlg/59	JU	13.63	5	Nat 1320UE	20	125	Drilling
Transworld Drlg/62	JU	13.63	10	Emsco C3 Type II	25	300	Drilling
Transworld Drlg/63	JU	13.63	5	Emsco C3 Type II	25	250	Stacked
Transworld Drlg/64	JU	13.63	10	Oilwl E3000	25	300	Drilling
Transworld Drlg/65	S	13.63	10	Emsco C3 Type II	25	70	Drilling
Transworld Drlg/66	S	13.63	10	Emsco C3 Type II	25	100	Drilling
Transworld Drlg/69	S	13.63	10	Oilwl E3000	25	100	Drilling
Transworld Drlg/71	JU	13.63	10	Emsco C3 Type II	25	250	Drilling
Transworld Drlg/72	S	13.63	10	Oilwl E3000	25	100	Drilling
Transworld Drlg/73	S	13.63	10	Oilwl E3000	25	100	Drilling
Zapata Offshore/Louisiana (13)	S	13.63	5	Unit U1220BE	20	50	Drilling
Zapata Offshore/Saratoga (27)	SS			Oilwl E3000			Drilling
Zapata Offshore/Whittington (40)	SS	18.75	10	Nat 1625DE	25	1250	Drilling
Zapata Offshore/Zapata Concord (25)	SS	18.75	10	Oilwl E3000	25	2000	Drilling
Zapata Offshore/Zapata Neptune (39)	SS	18.75	10	Nat 1625	25	1500	Drilling
Zapata Offshore/Zapata Yorktown (26)	SS	18.75	10	Oilwl E3000	25	2000	Drilling
Zapata Offshore/29	P	13.63	10	Oilwl E2000	20		Drilling
Zapata Offshore/30	P			MC U1220EB			Stacked
Zapata Offshore/34	P			Idco E3000			Stacked
Zapata Offshore/32 (Heritage)	JU	13.63	10	Nat 1320	20	250	Drilling
LOUISIANA-ASSUMPTION							
CRC Mallard/11	B	6.00	5	Wils 90	12	14	Workover
CRC Mallard/12	B	10.00	5	Wils 90	12	14	Workover
LOUISIANA-BAY MARCHAND							
Penrod Drlg/51	S	13.63	10	Emsco A1550E	25	60	Drilling
LOUISIANA-CAMERON							
Atlantic Pacific Marine/15							Drilling
Broughton Offshore Drlg/Broughton II	JU	13.63	10	Oilwl E3000	30	105	Drilling
CRC Mallard/3	B			Nat 55	9		Workover

UNITED STATES (Cont'd)

Contractor And Rig Name or No.	BOP Stack Type	BOP Stack Size (ID)	BOP Stack Pressure Rating, 1,000 psi	Drawworks Make And Model	Rated Depth With 4½-in. Pipe, 1000 ft.	Rated Water Depth	Status
LOUISIANA-CAMERON (Cont'd)							
CRC Mallard/15	B	10.00	5	Wils 90	12	14	Drilling
CRC Mallard/17	B	10.00	5	Wils 90	14	14	Workover
CRC Mallard/19	B	10.00	5	Wils 90	12	14	Drilling
Glendel Drlg/Mr Glen	B	13.63	10	S/B NE12	25	12	Drilling
Houtech Energy/I	JU	11.25	10	G-D 700M	10	73	Drilling
Magnum Marine/Mr Demp	JU	13.63	10	G-D 2100E	25	250	Drilling
Pool Offshore/51	JU	10.00	5	OIME 750	10	80	Stacked
Two R Drlg/Two R-16	B			Emsco C3	25	12	Drilling
LOUISIANA-EAST CAMERON							
Fluor Drlg Serv/Mr Sam	JU	13.63	10	G-D 1500RE	25	155	Drilling
Griffin-Alexander Drlg/IV	JU	13.63	10	MC EB 1220	25	200	Drilling
Keyes Offshore/Keyes 250	JU	13.63	10	Emsco C2	20	250	Drilling
Pool Offshore/452	P	13.63	5	OIME 1500	8		Drilling
Reading & Bates/C E Thornton	JU	13.63	10	Olwl E3000	25	300	Drilling
Salen Offshore/Salenergy I	JU	13.63	10	MC U1220EB	20	250	Drilling
Service Equipment/10	P	10.00	5	OIME 750	10		Workover
LOUISIANA-EUGENE ISLAND							
Chiles Drlg/Gulfwind	JU	13.63	10	Nat 1320UE	18	150	Drilling
Dixilyn-Field Drlg/77	S	13.63	10	Nat 1625DE	30	85	Stacked
Dixilyn-Field Drlg/80	JU	13.63	10	Nat 1320DE	20	370	Drilling
Dual Drlg/16	P	13.58	5	Nat 1320UE	25		Drilling
Fluor Drlg Serv/Mr Si	JU	13.63	10	Nat 1625DE	30	350	Drilling
Fluor Drlg Serv/63	P	13.63	10	Nat 1320UE	20		Drilling
Griffin-Alexander Drlg/III	JU	13.63	10	MC EB1200	25	250	
Loffland Bros/78	P	13.63	5	MC U1220BE	22		Drilling
Nicklos Drlg/82	P			Olwl E2000	20		Drilling
Penrod Drlg/81	JU	13.63	10	Emsco C3	30	340	Drilling
Penrod Drlg/83	JU	13.63	10	Nat 1320DE	25	250	Drilling
Penrod Drlg/86	JU	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/201	S	13.63	10	Nat 1320UE	25		Drilling
Penrod Drlg/202	S	13.63	10	Nat 1320UE	25		Drilling
Phoenix Management/Big Foot Two	JU	10.63	10	G-D 2100E	25	85	Drilling
Pool Offshore/54	JU	13.63	5	Idco E90	12	90	Drilling
Service Equipment/3	P	10.00	5	Cbot 1287	9		Workover
Service Equipment/9	P	10.00	5	OIME 750	11		Drilling
Temple Drlg/Cheyenne	JU	13.63	10	Olwl E2500	25	200	Drilling
LOUISIANA-GARDEN BANKS							
Penrod Drlg/73	SS			Nat 1625DE	30		Drilling
LOUISIANA-GRAND CANYON							
Penrod Drlg/89	JU	13.63	10	Nat 1320UE	25		Drilling
LOUISIANA-GRAND ISLE							
Chiles Drlg/I	P	13.63	10	Nat 1320UE	20		Drilling
Marlin Drlg/7	SS	13.63	10	Nat 1625DE	30	1000	En Route
Penrod Drlg/63	JU	13.63	10	Nat 1320UE	25	250	Drilling
Pool Offshore Serv/4	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/8	P	2.50	5	Wils Super 38			Workover
Pool Offshore Serv/12	P	2.50	5	Wils Super			Workover
Pool Offshore Serv/15	P	2.50	5	Wils Super 38			Workover
Rowan Co/Rowan Fort Worth	JU	13.63	10	Nat 1625	25	300	Drilling
LOUISIANA-GREEN CANYON							
Penrod Drlg/72	SS	13.63	10	Nat 1625DE	30	300	Drilling
Penrod Drlg/74	SS	13.63	10	Nat 1625DE	30	1700	Drilling
Penrod Drlg/76							Drilling
Penrod Drlg/77							Drilling
Penrod Drlg/78	S	13.63	10	Nat 1625E	25		Drilling
LOUISIANA-HIGH ISLAND							
Penrod Drlg/55	JU	13.63	10	Nat 1625DE	30	150	Drilling
Penrod Drlg/97	JU	13.63	10	Nat 1320DE	250	250	Drilling
Santa Fe Drlg/Blue Water 2	S	13.63	10	Nat 1625DE	25	55	Drilling
Santa Fe Drlg/Blue Water 4	SS	16.75	10	Emsco C3	25	1500	Drilling
LOUISIANA-HORSESHOE BAYOU							
Phoenix Management/The Mr Ray	B	10.63	10	G-D 2100E	30	8.5	Drilling
LOUISIANA-HOUMA							
Service Equipment/21	P	13.63	10	Idco 2100	25		Stacked
LOUISIANA-IBERIA							
Bay Drlg/Matagorda Bay	B	10.00	5	Emsco BL3661	25	14	Drilling
CRC Mallard/33		6.00			8		Stacked
CRC Mallard/34		6.00			10		Stacked
CRC Mallard/44	P	10.00		Wils 65	14		Stacked
CRC Mallard/46		13.63		Wils 65	12.5		Stacked
Goldrus Marine Drlg/4	B	13.63	10	Olwl 3000E	30	20	Stacked
Loffland Bros/153	B	10.00	5	Beth 1013	15		Stacked
Loffland Bros/154	B	10.00	5	MC U1220	22		Stacked
Penrod Drlg/40	B	13.63	10	Nat 1625DE	30	20	Stacked
Pool Offshore/136	P	13.63	5	Nat 110	16		Drilling
Temple Drlg/Tonkawa	B	13.63	10	Idco E3000	30	20	Drilling
Two R Drlg/Two R-14	B			Wils 250	25	20	Drilling
LOUISIANA-JEFFERSON							
Mayronne/M-142	P	13.63	5	S/B N12	16		Stacked
Pool Offshore/6	P	10.00	5	Nat T45	7		Stacked
Pool Offshore/8	P	10.00	5	Nat T45	6		Stacked
Pool Offshore/11	P	13.63	5	Nat 110H	16		Stacked
Pool Offshore/14	P			Nat T45	6		Stacked
Pool Offshore/423	P	13.63	5	OIME 1000E	12		Stacked
Two R Drlg/Two R-12	B			Nat 1625UE	25	12	Drilling
LOUISIANA-LAFOURCHE							
Bay Drlg/Gibbens	B	10.00	5	Nat 130	18	10	Drilling
Blocker Drlg & Marine/East Bay	B						Stacked
Blocker Drlg & Marine/Grand Bay	B						Stacked
LOUISIANA-LAFOURCHE (Cont'd)							
Blocker Drlg & Marine/Terrebonne Bay	B	13.63	5	OIME SL9E	20	12	Stacked
Blocker Drlg & Marine/West Bay	B						Stacked
Booker Drlg/11	P	10.00	5	G-D 3000			Stacked
Booker Drlg/15	P	10.00	5	G-D 3000			Stacked
Booker Drlg/50	P	10.00	5	G-D 500			Stacked
Booker Drlg/60	P	10.00	5	G-D 500			Stacked
Booker Drlg/70	P	10.00	5	G-D 500			Stacked
Booker Drlg/90	P	6.00	5	G-D 500			Stacked
Booker Drlg/100	P	6.00	5	G-D 500			Stacked
Booker Drlg/110	P	10.00	5	G-D 500			Stacked
Booker Drlg/120	P	10.00	5	G-D 500			Stacked
Booker Drlg/150	P	10.00	5	G-D 500			Stacked
CRC Mallard/1	B			Wils 90	9		Workover
CRC Mallard/14	B	6.00	5	Wils 90	12	14	Workover
CRC Mallard/16	B	10.00	5	Wils 90	12	14	Workover
Glendel Drlg/Mr A W	B	13.63	10	S/B NE12	25	12	Stacked
Glendel Drlg/Mr Beldon	B	13.63	10	S/B NE12	25	20	Drilling
Houtech Energy/II	JU	11.25	10	G-D 700M	10	73	Drilling
Mayronne/M-162	P	13.63	10	Nat 1320UE	20		Stacked
Noble Drlg/Barge 4	B			Nat 160S	25		Drilling
Pool Offshore/2	P	10	5	Nat T45	7		Drilling
Pool Offshore Serv/5	B	6.00	5	Wils Mogul 42		10	Workover
Pool Offshore Serv/18	B	7.06	5	Wils Mogul 42	8	12	Workover
Quarles Drlg/22	B	11.00	10	Olwl E3000	30	23	Drilling
Rebstock Drlg/Rig No 5	B	13.63	5	Nat 1320	20	24	Stacked
Rebstock Drlg/2	B	10.00	5	Nat N80	14	12	Stacked
Rebstock Drlg/3	B	10.00	5	G-D 800	13	12	Stacked
Rebstock Drlg/4	B	13.63	5	Olwl 860	18	12	Stacked
Temple Drlg/Tejas	B	13.63	10	Idco E3000	30	18	Drilling
Two R Drlg/Two R-15	B			Emsco C3	25	10	Drilling
LOUISIANA-MAIN PASS							
Booker Drlg/Rig No 170	P	10.00	5	G-D 500			Workover
Booker Drlg/30	P	6.00	5	G-D 500			Workover
Booker Drlg/130	P	10.00	5	G-D 500			Workover
Booker Drlg/140	P	6.00	5	G-D 500			Workover
Booker Drlg/951	P	10.00	5	G-D 1000	8		Drilling
Fluor Drlg Serv/Mr Mel	JU	13.63	10	Nat C1625DE	30	350	Drilling
Huthnance Drlg/Vanguard II	JU	13.63	10	Emsco U1220EB	25	300	Drilling
Huthnance Drlg/12	P	13.63	10	MC U1220	25		Drilling
Keyes Offshore/Keyes 301	JU	13.63	10	Emsco C2	20	300	Drilling
Noble Drlg/26	P	13.63	10	Nat 1320UE	20		Drilling
Penrod Drlg/91	JU	13.63	10	Nat 1320UE	25		Drilling
Reading & Bates/Randolph Yost	JU	13.63	10	Olwl E3000	20	300	Drilling
Service Equipment/14	P	13.63	5	Idco E900	14		Drilling
Teledyne Movible Offshore/2	S	13.63	5	Nat 1625DE	25	70	Drilling
Teledyne Movible Offshore/17	JU	13.63	10	Emsco C3 Type 2	25	250	Drilling
Temple Drlg/Apache	JU	13.63	10	Olwl E3000	25	55	Drilling
LOUISIANA-MAJESTIC BAYOU							
Penrod Drlg/48	B	13.63	10	Nat 1625DE	30	20	Workover
LOUISIANA-MISSISSIPPI CANYON							
Dual Drlg/25	P	13.63	10	Olwl E3000	25		Drilling
Dual Drlg/29	P	13.63	10	Emsco C3	30		Drilling
Dual Drlg/40							Drilling
Penrod Drlg/75	SS	13.63	10	Nat 1625DE	30	2000	Drilling
Western Oceanic/Alaskan Star	SS	16.75	10	Emsco C3	25	1500	Drilling
Western Oceanic/Western Pacesetter III	SS	18.75	10	Emsco C311	25	1200	Drilling
LOUISIANA-MORGAN CITY							
Penrod Drlg/31	P	13.63	10	Nat 110UE	16.5	300	Stacked
Penrod Drlg/32	P	13.63	10	Nat 1320UE	25	250	Stacked
Penrod Drlg/34	P	13.63	10	Nat 110UE	16.5	300	Stacked
Penrod Drlg/35	P	13.63	10	Nat 1320UE	16.5	300	Stacked
Penrod Drlg/37	P	13.63	10	Emsco C2	25	300	Stacked
Penrod Drlg/38	P	13.63	10	Nat 1320UE	25	300	Stacked
LOUISIANA-PLAQUEMINES							
Atlantic Pacific Marine/7	B	13.63	10	Olwl 2000	25	20	Drilling
Atlantic Pacific Marine/8	B	13.63	10	Olwl 2000	25	20	Drilling
Atlantic Pacific Marine/10	B	13.63	10	Olwl E2000	25	20	Drilling
Atlantic Pacific Marine/16							Drilling
Atlantic Pacific Marine/17							Drilling
Bay Drlg/Hebert	B	10.00	5	Emsco BL1013	16.5	10	Stacked
CRC Mallard/5	B			Nat 80B	11		Workover
Glendel Drlg/Mr Carl	B	13.63	10	S/B NE12	25	12	En Route
Glendel Drlg/Mr George	B	13.63	10	G-D 3000	30	25	Stacked
Harris Well Serv/16	B	7.16	5	MC U36A	10	12	Drilling
Noble Drlg/Barge 3	B			Nat 1320UE	20		Drilling
Penrod Drlg/45	B	13.63	10	Nat 1625DE	30	20	Drilling
Pool Offshore/50	JU	10.00	5	OIME 750	10	80	Drilling
Pool Offshore Serv/14	B	6.00		Wils Super 38			Workover
Quarles Drlg/18	B	11.00	10	G-D 800E	14	10	Stacked
Quarles Drlg/20	B	11.00	10	Idco E3000	25	18	Stacked
Quarles Drlg/21	B	13.63	10	Olwl 940E	20	30	Drilling
Shank Drlg/4	B			Emsco C3	30	12	Drilling
Two R Drlg/Two R-18	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-21	B			Emsco C3	25	12	Drilling
LOUISIANA-SABINE PASS							
Houston Offshore Intl/Sabine I	JU	13.63	10	Nat 1320UE	20	200	Drilling
Santa Fe Drlg/Choctaw I	SS	18.75	10	Nat 1320UE	20	800	Stacked
Santa Fe Drlg/Mariner 3	SS	16.75	10	Olwl E2000	20	600	Stacked
LOUISIANA-SHIP SHOAL							
Booker Drlg/14	P	10.00	5	G-D 3000			Workover
Booker Drlg/80	P	10.00	5	G-D 500			Workover
Chiles Drlg/Yucatan	JU	13.63	10	Nat 1625DE	25	300	Drilling
Keydril/Aleutian Key	SS	18.75	10	Olwl E3000	30	3000	Drilling
Keyes Offshore/Keyes 150	JU	13.63	10	Emsco C1	16	150	Drilling

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
LOUISIANA-SHIP SHOAL (Cont'd)							
Marlin Drlg/6	JU	13.63	10	Nat 1625DE	30	300	Drilling
Noble Drlg/S-55	SS	13.63	10	Nat 1625DE	25	80	Drilling
Penrod Drlg/53	JU	13.63	10	Nat 1625DE	30	300	Drilling
Penrod Drlg/70	SS	13.63	10	Nat 1625DE	30		Drilling
Phoenix Management/Big Foot One	JU	10.63	10	G-D 2100E	25	85	Drilling
Pool Offshore/3	P			Nat T45	6		Drilling
Teledyne Movible Offshore/20	JU	13.63	10	Emsco C3 Type 2	25	250	Drilling
LOUISIANA-SOUTH MARSH ISLAND							
Chiles Drlg/II	P	13.63	10	Nat 1320UE	20		Drilling
Cliffs Drlg/Cliffs Marquette	JU	13.63	10	Nat 1320UE	25	190	Drilling
Griffin-Alexander Drlg/II	JU	13.63	10	MC EB1200	25	200	
Keyes Offshore/Keyes 300	JU	13.63	10	Emsco C2	20	250	Drilling
Pool Offshore/140	P						Drilling
LOUISIANA-SOUTH PASS							
Bokenkamp Drlg/2	P	13.63	10	Oiwl E2000	25		
Booker Drlg/952	P	13.63	5	G-D 1000	8		Drilling
Dual Drlg/12	P	13.58	10	Emsco C2	25		Drilling
Dual Drlg/24	P	13.63	10	Oiwl E2000	25		Drilling
Dual Drlg/39	P	13.63	10	Oiwl E3000	30		Drilling
Huthnance Drlg/14	P	13.63	10	MC U1220	25		Completion
Mayronne/M-172	P	13.63	10	Nat 1320UE	20		Stacked
Penrod Drlg/42	B	13.63	10	Nat 1625DE	30	20	Workover
Pool Offshore/9	P	13.63	5	Nat T45	6		Drilling
Rowan Co/Rowan Midland	SS	13.63	10	Nat 1625	25	600	Drilling
Service Equipment/11	P	11.00	5	Idco E900	14		Drilling
LOUISIANA-SOUTH TIMBALIER							
Marlin Drlg/4	JU	13.63	10	Nat 1625DE	25	150	Drilling
Noble Drlg/Sam Noble	JU			Oiwl E3000	25		Drilling
Nordrill Intl/Steeler	JU	13.63	10	Emsco C3	25	200	Drilling
Penrod Drlg/36	P	13.63	10	Nat 1320UE	30	300	Drilling
Penrod Drlg/59	JU	13.63	10	Nat 1625DE	30	220	Drilling
Penrod Drlg/66	JU	13.63	10	Nat 1625DE	30	210	Drilling
Penrod Drlg/82	JU	13.63	10	Nat 1320DE	25	250	Drilling
Penrod Drlg/90	JU	13.63	10	Nat 1320UE	25		Drilling
Rowan Intl/Rowan Anchorage	JU	13.63	5	Nat 1320UE	25	225	Drilling
Service Equipment/5	P	10.00	5	OIME 750	11		Workover
Service Equipment/7	P	10.00	5	OIME 750	11		Workover
Service Equipment/12	P	11.00	5	Idco E900	14		Drilling
LOUISIANA-ST BERNARD							
CRC Mallard/18	B	10.00	5	Wils 90	12	14	Drilling
Two R Drlg/Two R-17	B			Emsco CEC3	25	22	Drilling
LOUISIANA-ST MARTIN							
Cliffs Drlg/3	B	13.63	10	MC U1220EB	30		Drilling
Queries Drlg/17	B	11.00	10	Nat 160E	25	20	Drilling
Shank Drlg/3	B	10.00	5	Beth B3661	25	12	Drilling
LOUISIANA-ST MARY							
Atlantic Pacific Marine/9	B	13.63	10	Oiwl E2000	25	20	Drilling
Atlantic Pacific Marine/11	B	13.63	10	Oiwl E2000	25	13	Drilling
Bay Drlg/Mr Harvy	B	10.00	5	Nat 1625M	25	12	Drilling
Bay Drlg/St John	B	10.00	5	Nat 1625M	25	11	Drilling
Bay Drlg/Terrebonne Bay	B	11.00	5	Nat 1625	25	10	Drilling
Cactus Intl/101	P	13.63	5	Emsco Electrohoist II	25		Stacked
Cactus Intl/102	P	13.63	5	Emsco C2	25		Stacked
Cactus Intl/103	P	13.63	5	Oiwl E2000	25		Stacked
Cactus Intl/104	P	13.63	5	Emsco Electrohoist II	25		Stacked
Cactus Intl/162	P	13.63	5	Emsco A1500	25		Stacked
Cactus Intl/163	P	13.63	5	Emsco Electrohoist II	25		Stacked
Cactus Intl/165	P	13.63	5	Oiwl E2000	25		Stacked
Cliffs Drlg/4	B	13.63	10	MC U1220EB	30		Drilling
Dolphin Titan Intl/101	JU	6.00	5	Idco H35D	15	70	Stacked
Dolphin Titan Intl/104	JU	10.00	5	Idco H35D	15	70	Stacked
Dolphin Titan Intl/122	P	13.63	5	Nat 110UE	16		Stacked
Dolphin Titan Intl/123	P	13.63		Idco E1700	20		Stacked
Dolphin Titan Intl/124	P	13.63	5	MC U1220EB	20		Stacked
Dolphin Titan Intl/126	P	13.63	5	MC U1220EB	20		Stacked
Dolphin Titan Intl/127	P	13.63	10	Emsco C3 Type II	25		Stacked
Magnum Marine/R N Haskin	JU	13.63	10	Sup 2000E	25	100	Drilling
LOUISIANA-TERREBONNE							
Atlantic Pacific Marine/Ranger III	JU	10.00	5	G-D DW500R	9	70	Drilling
Atlantic Pacific Marine/Ranger IV	JU	10.00	5	Oiwl 660	9	73	Drilling
Atlantic Pacific Marine/12	B	13.63	5	Oiwl E2000	25	13	Drilling
Atlantic Pacific Marine/14	B	13.63	5	Oiwl E2000	25	13	Drilling
Bay Drlg/Caillou	B	11.00	5	Emsco B3661	25	10	Stacked
Cliffs Drlg/1	B	13.63	10	MC U1220EB	30	18	Drilling
CRC Mallard/4	B			Nat 80	11		Workover
CRC Mallard/20	B	10.00	5	Wils 90	12	14	Drilling
Houtech Energy/III	JU	11.25	10	G-D 700M	10	73	Drilling
Loffland Bros/4	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/17	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/74	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/75	P	13.63	5	MC U1220BE	22		Stacked
Loffland Bros/76	P	13.63	5	MC U1220BE	22		Stacked
Penrod Drlg/41	B	13.63	10	Nat 1625DE	30		Stacked
Penrod Drlg/43	B	13.63	10	Nat 1320DE	25	12	Stacked
Penrod Drlg/44	B	13.63	10	Nat 1625DE	30	10	Stacked
Penrod Drlg/47	B	13.63	10	Emsco A1500E	25	16	Stacked
Penrod Drlg/49	B	13.63	10	Nat 1625DE	30	20	Stacked
Shank Drlg/2	B	10.00	5	Wils 150-2000	18	10	Drilling
Two R Drlg/Two R-1	B			Beth B3661	25	10	Stacked
Two R Drlg/Two R-19	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-20	B			Emsco C3	25	12	Drilling
Two R Drlg/Two R-22	B			Emsco C3	30	10	Drilling

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth •	Status •
LOUISIANA-VERMILION							
Dixilyn-Field Drlg/84	JU	13.63	10	Nat 1320UE	20	250	Drilling
Glendel Drlg/Mr Del	B	13.63	10	S/B NE12	25	20	Stacked
Goldrus Marine Drlg/2	B	13.63	10	Oiwl 3000E	30	20	Drilling
Goldrus Marine Drlg/3	B	13.63	10	Oiwl 3000E	30	20	Drilling
Griffin-Alexander Drlg/VI	JU	13.63	10	MC EB1220	25	200	
Huthnance Drlg/Acadian Spirit	JU	13.63	10	Emsco C2	25	112	Drilling
Keyes Offshore/Keyes 302	JU	13.63	10	Emsco C2	20	300	Drilling
Keyes Offshore/Keyes 303	JU	13.63	10	Emsco C3	25	300	Drilling
Loffland Bros/143	B	10.00	5	MC U1220	22		Drilling
Noble Drlg/NN-1	JU			G-D 1500	20	12-45	Drilling
Noble Drlg/PB-3	B			Nat 1625DE	25		Drilling
Noble Drlg/28				G-D 1500E	20		Drilling
Nordrill Intl/Gulfdrill	JU	13.63	10	Emsco C3	25	150	Drilling
Penrod Drlg/50	S	13.63	10	Emsco A1500E	25	50	Drilling
Penrod Drlg/87	JU	13.63	10	Nat 1320UE	25		Drilling
Pool Offshore/5	P	10.00	5	Nat T45	6		Drilling
Teledyne Movible Offshore/19	JU	13.63	10	Emsco C3 Type 2	25	250	Workover
Two R Drlg/Two R-10	B			Nat 1320M	20	10	Drilling
Western Oceanic/Nike I	JU	13.63	10	Nat 1320	20	150	Drilling
LOUISIANA-WEST CAMERON							
Cliffs Drlg/Cliffs LaSalle	JU	13.63	10	Nat 1320UE	25		Drilling
Dixilyn-Field Drlg/83	JU	13.63	10	Nat 1320UE	20	250	Drilling
Houston Offshore Intl/Sabine IV	JU	13.63	10	Nat 1320UE	20	200	Drilling
Houston Offshore Intl/Sabine V	JU	13.63	10	Nat 132OUE	20	200	Drilling
Huthnance Drlg/Charger I	JU	21.25	2	MC U1220EB	25	150	Drilling
Huthnance Drlg/Charger II	JU	13.63	10	MC U1220EB	25	150	Drilling
Nordrill Intl/Oiler	JU	13.63	10	Emsco C2	25	200	Drilling
Penrod Drlg/54	JU	13.63	10	Nat 1625DE	30	300	Stacked
Penrod Drlg/60	JU	13.63	10	Emsco C3	30	330	Drilling
Penrod Drlg/65	JU	13.63	10	Emsco C3	30	210	Stacked
Penrod Drlg/68	JU	13.63	10	Nat 1625DE	30	330	Drilling
Penrod Drlg/98							Drilling
Pool Offshore/53	JU	10.00	5	OIME 750	12	90	Drilling
Pool Offshore Serv/903	P	2.50	5	Wils Super			Drilling
Rowan Intl/Rowan-Houston		13.63	10	Nat 1325UE	25	225	Drilling
Salen Offshore/Salenergy VI							Drilling
Teledyne Movible Offshore/18	JU	13.63	10	Emsco C3 Type II	25	250	Drilling
Temple Drlg/Comanche	JU	13.63	10	Oiwl E2000	25	150	Drilling
Western Oceanic/Western Delta	JU	13.63	5	Nat 80UE	15	173	Drilling
LOUISIANA-WEST DELTA							
Bokenkamp Drlg/4	P	13.63	10	Oiwl E2000	25		
Booker Drlg/6	P	2.50	5	G-D 3000			Workover
Booker Drlg/10	P	10.00	5	G-D 3000			Workover
Booker Drlg/950	P	13.63	5	G-D 1000	10		Completion
Dixilyn-Field Drlg/76	S	13.63	10	S/B N12A	20	80	Drilling
Fluor Drlg Serv/Mr Gus II	JU	13.63	5	Nat 160E	25	150	Drilling
Huthnance Drlg/15	P	13.63	5	MC U1220	25		Drilling
Keyes Offshore/Keyes 200	JU	13.63	10	Emsco C2	20	200	Drilling
Mayronne/M-152	P	13.63	5	S/B N20	18		Drilling
Pool Offshore/17	P	13.63	5	OIME 1500	16		Drilling
Pool Offshore/80	P	13.63	5	Idco 2000	20		Drilling
Pool Offshore Serv/17	P	2.50	5	Wils Super 38			Workover
Service Equipment/6	P	10.00	5	OIME 750	11		Workover
MISSISSIPPI-UNDESIGNATED							
Transworld Drlg/70	S	13.63	10	Oiwl E3000	25	100	Drilling
MISSISSIPPI-PASCAGOULA							
Sedco Undersea Drlg/Sedco 471	DS	18.75	10	Oiwl E3000	25	6000	Maintenance
TEXAS-UNDESIGNATED							
Bokenkamp Drlg/1	P	13.63	10	Oiwl E2000	25		Stacked
Bokenkamp Drlg/3	P	13.63	10	Oiwl E2000	25		Stacked
Diamond M/97	P	13.63	10	Oiwl E2000	20		Stacked
Diamond M/99	JU	13.63	10	Oiwl E3000	30	300	Drilling
Dolphin Titan Intl/125	P	13.63	5	Nat 1320UE	20		Drilling
Helmerich & Payne Intl Drlg/100	P	13.63	10	Oiwl E3000	30		Drilling
JFP Well Serv/JFP Five	JU	13.63	10	Oiwl E2000	25/5"	120	Drilling
Marine Drlg/J Storm III	JU	13.63	10	Nat 1625M	25	250	Drilling
Marine Drlg/J Storm IX	JU	13.63	10	Nat 1320	20	195	Drilling
Marine Drlg/J Storm VI	JU	13.63	10	Nat 1625M	25	250	Drilling
Marine Drlg/J Storm VIII	JU	13.63	10	Nat 1320	20	150	Drilling
Marine Drlg/J Storm X	JU	13.63	10	Nat 1320	20	250	Drilling
Marine Drlg/J Storm XII	JU	13.63	10	Nat 1320	20	200	Drilling
Marine Drlg/J Storm XIV	JU	13.63	10	Nat 1320	20	200	Drilling
Marine Drlg/J Storm XV	JU	13.63	10	Nat 1625M	25	250	Drilling
Marine Drlg/J Storm XVI	JU	13.63	10	Nat 1320	20	250	Drilling
Marine Drlg/J Storm XVIII	JU	13.63	10	Nat 1320M	25	250	Drilling
Nickloe Drlg/83	P			Nat 110UE	16		Stacked
Ocean Drlg & Expl/Ocean Champion	JU	13.63	10	Nat 1625DE	25	250	Drilling
Ocean Drlg & Expl/Ocean Chief	JU	13.63	5	Emsco A1500	25	224	Drilling
Ocean Drlg & Expl/Ocean Driller	SS	13.63	10	Emsco C2	25	600	Drilling
Ocean Drlg & Expl/Ocean Leader	JU	13.63	5	Nat 130	25	175	Drilling
Ocean Drlg & Expl/Ocean Ruler	JU			Nat 1625	25	250	Drilling
Ocean Drlg & Expl/Ocean Scout	SS	13.63	10	Emsco C3 Type II	25	600	Drilling
Pool Offshore/142	P			Wils 75-750	10		Stacked
Pool Offshore/456	P	13.63	5	OIME 1500	16		Stacked
Pool Offshore Serv/22	B	11.00	5	Wils Super Giant	12	12	Drilling
Pool Offshore Serv/24	B	11.00	5	Wils Super Giant	12	12	Drilling
Skinner Marine/Skinmar II	P	13.63	5	Oiwl E2000	20	185	Stacked
Skinner Marine/Skinmar III	P	13.63	5	Oiwl E2000	20	185	Stacked
Transworld Drlg/50	JU	13.63	5	Nat 55	12	70	Drilling
Zapata Offshore/Zapata Lexington (26)	SS	18.75	10	Oiwl E3000	25	2000	Under Repair

UNITED STATES (Cont'd)

Contractor And • Rig Name or No.	Type •	BOP Stack Size (ID) •	BOP Stack Pressure Rating, 1,000 psi •	Drawworks Make And Model •	Rated Depth With 4½-in. Pipe, 1000 ft. •	Rated Water Depth, •	Status •
TEXAS-ARANSAS							
Rio Grande Drlg/1	B	13.63	5	Nat 110M	18	14	Stacked
Rio Grande Drlg/4	B	13.63	10	Nat 1320M	25	14	Drilling
TEXAS-BRAZOS							
Broughton Offshore Drlg/Broughton I	JU	13.63	10	Oiwl E3000	30	105	Drilling
Fluor Drlg Serv/Mr Dave	JU	13.63	10	Nat 1320UE	20	250	Drilling
Fluor Drlg Serv/62	P	13.63	10	Nat 1320UE	20		Drilling
Noble Drlg/29	P	13.63	10	Oiwl E2000	20		Drilling
Penrod Drlg/84	JU	13.63	10	Nat 1320UE	25	250	Drilling
Rowan Co/Rowan Odessa	JU	13.63	10	Nat 1625	25	300	Drilling
TEXAS-CALHOUN							
CRC Mallard/7	B			Nat 55	11		Workover
Dixilyn-Field Drlg/56	B	10.00	5	Nat 130	20	8	Drilling
TEXAS-CHAMBERS							
Dixilyn-Field Drlg/51	B	10.00	5	Nat 110	18	10	Drilling
MGF Drlg/37	B	6.00	5	G-D 500	9	10	Workover
TEXAS-EAST BREAKS							
Marlin Drlg/5	P	13.63	10	Nat 1320DE	20		Drilling
Reading & Bates/Rig 40	P	13.63	10	Nat 1625	18		Drilling
Service Equipment/15	P	13.63	10	Idco E900	17		Drilling
TEXAS-GALVESTON							
MGF Drlg/31	B	10.00	5	Oiwl 76	12	10	Drilling
Nordrill Intl/Falcon	JU	13.63	10	Emsco C2	25	200	Drilling
Penrod Drlg/46	B	13.63	10	Emsco ECB	20	16	Stacked
Pool Offshore/55	JU	13.63	5	Idco E90	12	90	Stacked
Rowan Co/Rowan-Texas	JU	13.63	10	Nat 1320UE	25	225	Drilling
TEXAS-HIGH ISLAND							
Booker Drlg/8	P	2.50	5	G-D 3000			Workover
Booker Drlg/20	P	6.00	5	G-D 500			Workover
Booker Drlg/180	P	10.00	5	G-D 500			Workover
Chiles Drlg/Gulfstream	JU	13.63	10	Nat 110UE	18	150	Drilling
Dixilyn-Field Drlg/85	JU	13.63	10	Nat 1320UE	20	200	Drilling
Dixilyn-Field Drlg/86	JU	13.63	10	Nat 1320UE	20	200	Drilling
Griffin-Alexander Drlg/VII	JU	13.63	10	MC EB1220	25	250	
Huthnance Drlg/11	P	13.63	5	MC U1220	25		Drilling
Nordrill Intl/Seahawk	JU	13.63	10	Nat 1625UE	25	250	Drilling
Phoenix Management/The Mr Ric	JU	13.63	10	G-D 2100E	20	100	Drilling
TEXAS-HIGH ISLAND (Cont'd)							
Reading & Bates/Leo M Clark	PT	13.63	10	Nat 110M	18		Drilling
Salen Offshore/Salenergy V	JU	13.63	10	MC U1220BE	20	250	Drilling
Service Equipment/4	P	10.00	5	OIME 500	9		Workover
Teledyne Movible Offshore/4	P	13.63	5	Nat 110UE	16		Drilling
Western Oceanic/Western Triton IV	JU	13.63	10	Emsco C2	20	250	Drilling
TEXAS-INGLESIDE							
Marine Drlg/Stormdrill V	JU	13.63	10	Nat 130	20	115	Stacked
TEXAS-MATAGORDA							
Cliffs Drlg/2	B	13.63	10	MC U1220EB	30		Drilling
Griffin-Alexander Drlg/V	JU	13.63	10	MC EB1220	25	200	
Pool Offshore/23	P	10.00	5	Nat T45	7		Stacked
Rowan Intl/Rowan-New Orleans	JU	13.63	5	Nat 1324UE	25	225	Drilling
TEXAS-MATAGORDA ISLAND							
Houston Offshore Intl/Nueces I	JU	13.63	10	Nat 1320UE	16	115	Drilling
Loffland Bros/79	P	13.63	5	MC U1220BE	22		Drilling
Noble Drlg/Ed Holt	JU			Oiwl E3000	25		Drilling
Penrod Drlg/30	P	13.63	10	Nat 1320UE	25	250	Drilling
Penrod Drlg/88	JU	13.63	10	Nat 1320UE	25	250	Drilling
Rowan Co/Rowan Paris	JU	13.63	10	Nat 1625	25	300	Drilling
Teledyne Movible Offshore/16	JU	13.63	10	Emsco C3 Type 2	25	250	Drilling
TEXAS-MUSTANG ISLAND							
Dual Drlg/23	P	13.63	10	Oiwl E3000	25		Drilling
Houston Offshore Intl/Sabine II	JU	13.63	10	Nat 1320UE	20	200	Drilling
Huthnance Drlg/Vanguard I	JU	13.63	10	MC U1220EB	25	300	Drilling
Marlin Drlg/3	JU	13.63	10	Nat 1625DE	25	250	Drilling
Nicklos Drlg/81	P			Nat 1320UE	20		Drilling
Penrod Drlg/69	JU	13.63	10	Nat 1625DE	30	330	Drilling
Reading & Bates/63	P	13.63	10	Oiwl E3000	25		Drilling
Rowan Co/Rowan Louisiana	JU	13.63	10	Nat 1625DE		300	Drilling
Western Oceanic/Western Triton III	JU	13.63	10	Emsco C2	20	250	Drilling
TEXAS-NORTH PADRE ISLAND							
Keydril/Key Manhattan	JU	13.63	10	Nat 1625DE	25	300	Drilling
TEXAS-NUECES							
Magnum Marine/R M Womack	JU	13.63	10	Sup 2000E	25	100	Drilling

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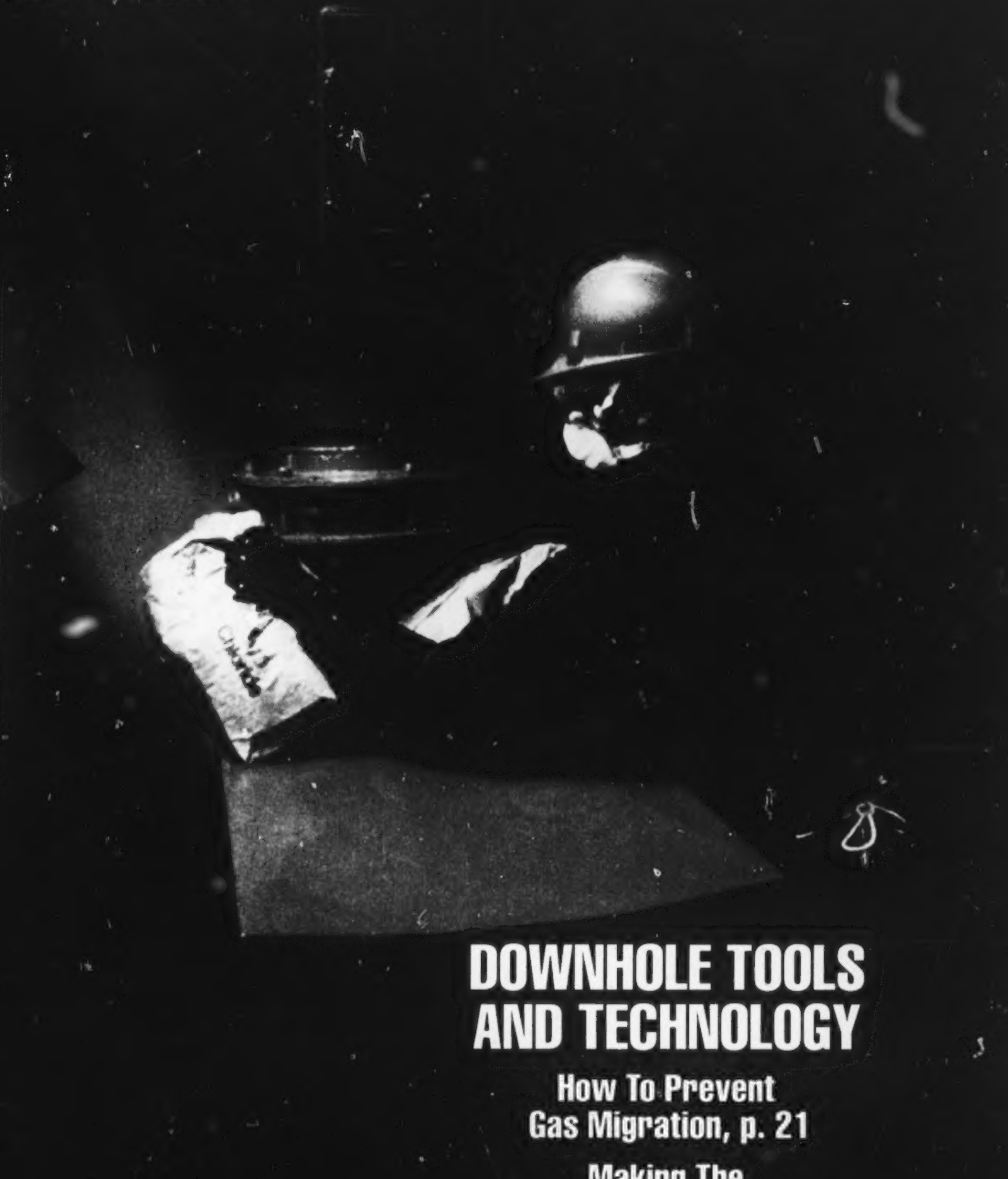

DOWNHOLE TOOLS AND TECHNOLOGY

How To Prevent Gas Migration, p. 21

Making The Most of Gas Lift, p. 26

An Independent's View Of Downhole Technology, p. 37

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U.S. Rig Count Drops Below 2,000 in Mid-March

The U.S. rotary rig count dropped below the 2,000 mark in mid-March as drilling budgets continued to feel the effects of falling prices for oil and gas, as well as negative vibrations from tax men at both the federal and state levels.

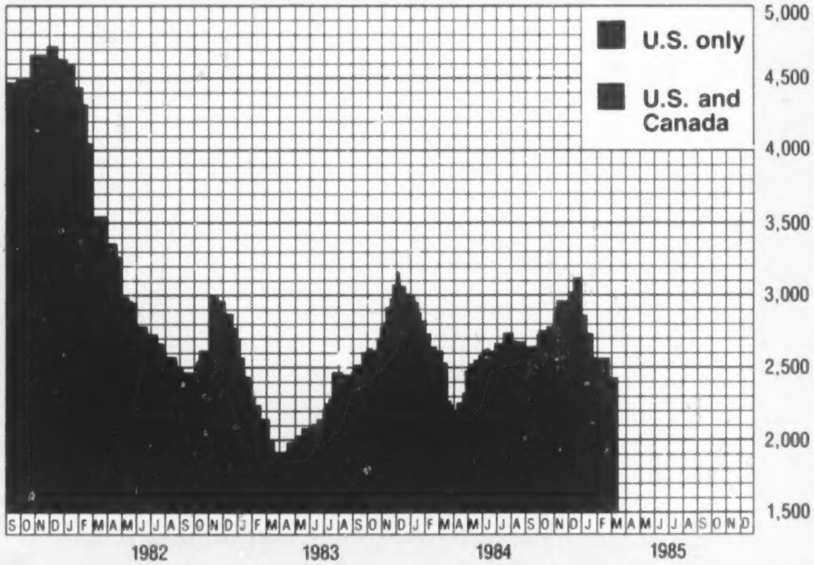
Dramatic drilling declines in Illinois, Indiana, and Ohio during early March, however, are something that happens almost every year as springtime thaws make clay-based roads in the area virtually unpassable. The situation is expected to improve this month.

Canadian drillers, on the other hand, do their best work during the springtime, and this year is no exception. The 415-rig count in Canada on March 4 is the highest total for that country since March 16, 1981.

Rotary rigs actually making hole in the United States and Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Feb. 18, 1985	Feb. 25, 1985	Mar. 4, 1985	Mar. 11, 1985
Alabama				
Land	9	14	15	16
Inland Waters	2	2	2	2
Offshore	6	5	5	6
Total	17	21	22	24
Alaska				
Land	19	17	16	16
Offshore	7	6	6	6
Total	26	23	22	22
Arkansas	27	28	25	28
California				
Land	69	60	57	55
Offshore	19	19	19	18
Total	88	79	76	73
Colorado	50	50	51	57
Florida				
Land	4	4	3	3
Offshore	1	2	2	2
Total	5	6	5	5
Hawaii	1	1	0	0
Idaho	2	2	2	2
Illinois	35	20	6	8
Indiana	6	7	0	2
Kansas	96	92	76	90
Kentucky	5	3	5	6
North Louisiana	30	32	31	27
South Louisiana				
Inland Waters	50	45	42	42
Land	93	90	96	101
Offshore	140	133	129	126
Total	313	300	298	296
Michigan	36	37	39	26
Mississippi	34	36	34	29
Montana	17	19	23	25
Nebraska	6	8	5	3
Nevada	4	3	3	2
New Mexico	69	71	68	69
New York	5	6	3	3
North Dakota	32	36	32	23
Ohio	52	44	34	15
Oklahoma	266	270	243	228
Oregon	1	0	0	0
Pennsylvania	46	49	42	38
South Dakota	5	1	1	0
Texas				
Offshore	59	62	66	68
Inland Waters	8	5	5	3
Dist. 1-S. Central Tex.	17	18	17	17
Dist. 2-Middle Tex.	32	33	32	30
Dist. 3-Upper Tex.	87	88	87	83
Dist. 4-Lower Tex.	82	80	87	83
Dist. 5-Northeast Tex.	30	38	30	33
Dist. 6-Far Northeast Tex.	58	56	50	47
Dist. 7B-N. Central Tex.	48	52	50	51
Dist. 7C-W. Central Tex.	57	60	52	47
Dist. 8-Far West Tex.	134	139	134	126
Dist. 8A-West Tex.	74	67	69	65
Dist. 9-North Tex.	46	48	46	46
Dist. 10-Tex. Panhandle	40	37	35	38
Total	772	783	760	737
Utah	35	36	29	27
West Virginia	20	25	22	19
Wyoming	91	87	85	77
Total U.S.	2,162	2,143	2,011	1,934
Canada				
Land	388	389	406	404
Offshore	13	9	9	11
Total Canada	402	398	415	415
U.S. and Canada	2,564	2,541	2,426	2,349



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Postmaster: Send address changes to Petroleum Engineer International, P.O. Box 1589, Dallas, Texas 75221-1589, USA.

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Petroleum Engineer® INTERNATIONAL

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APRIL 1985 NUMBER 4 VOLUME 57

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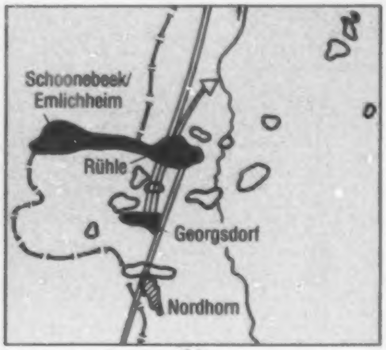

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DOWNHOLE TOOLS AND TECHNOLOGY

Conoco Stops Annular Gas Flow With Special Cement 21

by Don Stehle, Conoco Inc., and Fred Sabins, Jim Gibson, Karl Theis, and J.J. Venditto, Halliburton Services. Many wells put on production since 1975 were experiencing annular gas flow between intermediate and production casing.

Gas Lift: How To Make The Most Of It, Part 1 26

by Richard F. Keelan, The Moran Corp. Variations in independent correlations can be significant because of specific flow rates, tubing sizes, water cuts, and other conditions for which predicted gradients better match measured conditions.

The Independent's Role In Developing Downhole Technology 37

James F. Massey, a vice president of Hamon Oil Co. of Dallas, wonders whether the industry will be able to afford the costs associated with development of the latest downhole technology because of the depressed prices of both oil and gas.

New Method Estimates Well-Treatment Volumes 38

by H.W. Bang, Phillips Oil Co. Treatment volumes larger than needed can be wasteful, so optimum volumes are determined mathematically, as are the most economical concentrations of chemical additives for the area of the reservoir being treated.

How To Apply The New API Adjustment For Collapse Resistance 44

by Phillip D. Pattillo, Amoco Production Co. Determining tubular collapse resistance usually is a two-step process – first, without axial load, and then adjustments to account for tension or compression. Conclusion of a two-part report.

What's New... In Downhole Tools and Technology 56

An economical alternative to other high-density gravel pack techniques is outlined this month, as are a positive displacement pump that is powered by a hydraulic unit on the surface and one of the industry's most reliable inflatable packers.

Engineers Solve Excess Water Problems in German Steam Drive Areas 64

by R. Mueller and F.P. Springer, BEB. Reverse osmosis and distillation are used in several installations to desalt seawater. A third process, desalting by freezing, is in the experimental stage. This process requires an aftertreatment.

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ABOUT THE COVER: A technician mans an enclosed mud hopper that is vented to prevent the spread of dust. Such hoppers are standard equipment in the Keydril rig fleet.

NEXT MONTH: Offshore technology will be the theme of the May issue, in keeping with the annual Offshore Technology Conference held in Houston each May.

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MAY 1985
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Bit Analysis, p. 72

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Thaw Slows Canadian Drillers

The spring thaws arrived on schedule in Canada this year resulting in an abrupt 56.5% decline in drilling activity north of the border during the mid-March to mid-April period covered by this report.

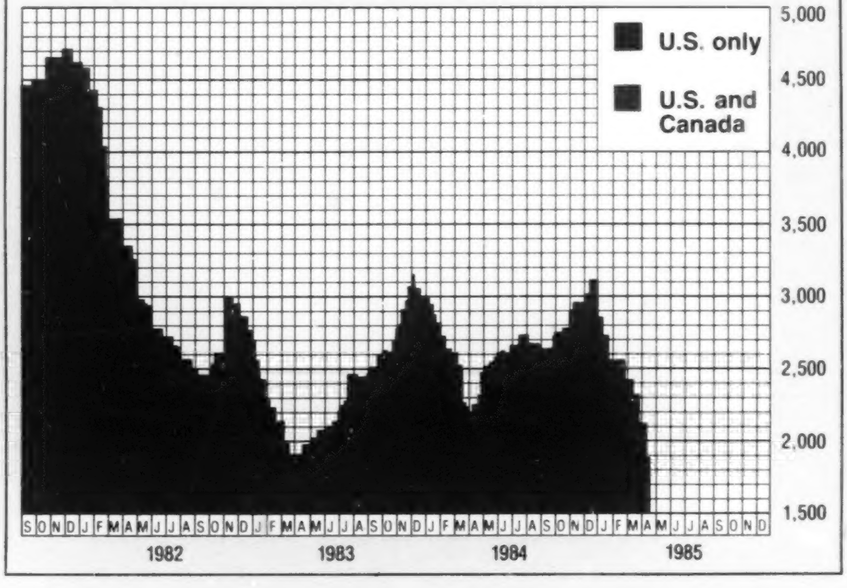
In the U.S., meanwhile, the drilling decline has been less spectacular. But it has been going on all year, and has now reached 26%, with close to 700 rigs idled since the beginning of 1985. More than 200 of the idled rigs are in Texas.

The U.S. rotary rig slowdown has been largely limited to onshore activity. Only 13% of the decline occurred offshore, where the rig count is down by 32 since the beginning of the year.

Rotary rigs actually making hole in the United States & Canada

As reported to International Association of Drilling Contractors by Hughes Tool Co.

	Mar. 18, 1985	Mar. 25, 1985	Apr. 1, 1985	Apr. 8, 1985
Alabama				
Land	14	16	14	12
Inland Waters	2	2	2	0
Offshore	6	6	6	9
Total	22	24	22	21
Alaska				
Land	15	16	16	16
Offshore	5	5	5	5
Total	20	21	21	21
Arkansas	30	30	29	24
California				
Land	58	64	65	65
Offshore	12	11	10	8
Total	70	75	75	73
Colorado	56	49	56	54
Florida				
Land	3	3	3	3
Offshore	2	2	2	2
Total	5	5	5	5
Idaho	2	2	1	1
Illinois	9	13	15	16
Indiana	2	3	3	3
Kansas	99	99	86	84
Kentucky	4	4	5	5
North Louisiana	25	22	21	25
South Louisiana				
Inland Waters	38	42	47	40
Land	93	83	87	92
Offshore	136	133	136	130
Total	292	280	291	288
Michigan	11	11	10	7
Mississippi	32	29	33	26
Montana	25	23	22	19
Nebraska	3	3	5	5
Nevada	2	3	4	4
New Mexico	63	63	70	69
New York	4	0	2	0
North Dakota	23	37	34	35
Ohio	13	37	17	10
Oklahoma	249	259	250	271
Pennsylvania	38	30	31	26
Texas				
Offshore	61	57	61	57
Inland Waters	4	3	3	3
Dist. 1-S. Central Tex.	17	14	14	15
Dist. 2-Middle Tex.	28	24	23	23
Dist. 3-Upper Tex.	82	81	78	83
Dist. 4-Lower Tex.	76	72	73	70
Dist. 5-Northeast Tex.	32	31	32	35
Dist. 6-Far Northeast Tex.	45	47	48	41
Dist. 7B-N. Central Tex.	50	50	42	46
Dist. 7C-W. Central Tex.	49	51	60	50
Dist. 8-Far West Tex.	126	129	115	113
Dist. 8A-West Tex.	70	67	66	66
Dist. 9-N. Tex.	53	47	41	50
Dist. 10-Tex. Panhandle	42	41	37	37
Total	735	714	693	689
Utah	28	29	22	27
Virginia	0	0	0	2
W. Virginia	25	30	32	32
Wyoming	75	82	74	81
Total U.S.	1,937	1,939	1,910	1,898
Canada				
Land	393	339	227	166
Offshore	7	7	8	8
Total Canada	400	346	235	174
U.S. and Canada	2337	2285	2145	2072



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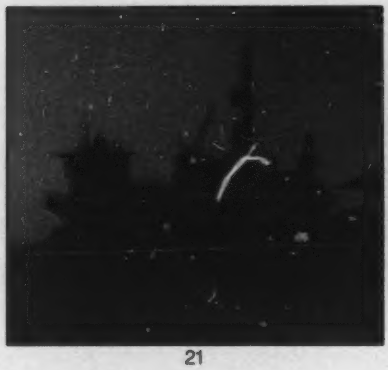
Postmaster: Send address changes to Petroleum Engineer International, P.O. Box 1589, Dallas, Texas 75221-1589, USA.

PETROLEUM ENGINEER INTERNATIONAL (ISSN 0164-8322) published 13 times each year, monthly plus July 15, by Energy Publications Division, Harcourt Brace Jovanovich, P.O. Box 1589, Dallas, Texas 75221-1589. Accounting and Circulation offices: 1 East First Street, Duluth, Minnesota 55802. May 1985, Volume 57, No. 5. Copyright © 1985 by Harcourt Brace Jovanovich, Inc. All rights reserved. No part of this publication may be transmitted or reproduced in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher. Subscription rate to personnel employed by companies involved with exploration, drilling, or production of oil or gas: one year $18.00, three years $36.00 for North, Central, and South America. Outside North, Central, and South America: one year $38.00, three years $58.00. Subscription rate for all others: $50.00 for one year. Single copy price $3.00. Second class postage paid at Duluth, Minnesota and additional mailing offices. Indexed by Applied Science, Technology Index, and the Engineering Index, Inc.

Petroleum Engineer® INTERNATIONAL

The international magazine
of methods for engineering/
operating people

MAY 1985 NUMBER 5 VOLUME 57



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OFFSHORE TECHNOLOGY

Drillers Hopes Riding On "Last Frontier" 21

by Rich McNally, Associate Editor. Offshore is where it's at. Particularly in view of the fact that the inventory of drillable offshore leases has increased significantly, especially in the Gulf of Mexico and offshore northwestern Europe.

Deepwater Repair Capability Extended To 8,000 Ft 28

by M.A. Stevenson, D.C. Beebe, and R.D. King, Gulf Oil Exploration and Production Co. A system for the repair of deepwater flow lines and pipelines also appears to be a viable alternative to hyperbaric welding in shallower water depths.

Platform Inspection And Maintenance: An Expensive Necessity 30

by W.B. Bleakley, Editor. Platforms in water depths to 300 or 400 ft generally are inspected by divers. Those in deeper waters require the use of ROVs or 1-atm diving suits. Saturation diving for platform inspection is rare because of high costs.

Gas Lift: How To MakeThe Most Of It 44

by Richard F. Keelan, Morgas Intrastate Gas Co. A plunger occasionally is used in intermittent lift operations to minimize liquid fallback from the liquid slug. Usually, a small fluid column can benefit from the greater efficiency of a plunger installation.

Modern Production Risers 56

by George W. Morgan, Engineering Consultant. This is the conclusion of a 16-part series, and it points out that all engineering and management personnel involved in riser test programs should agree on the worded form of the objectives before the test begins.

Quick TI Program Calculates Surge Pressures 66

by W.R. Matthews, Engineering Consultant. A simple program developed for the TI-59 hand-held calculator determines the equivalent circulating densities at the casing seat and drill bit as the drill string is run in the hole.

How To Analyze Bit Records To Increase Penetration Rates 72

by Samuel L. Hawkes, Smith Tool. A bit record analysis worksheet has been developed to help determine where improvements might be made and what their impact might be on penetration rates. It also will help in preparing a recommended bit program.

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ABOUT THE COVER: Activities offshore are as varied as they are unusual, but the common denominator is technology. (Photo courtesy of Sedco Forex)

NEXT MONTH: The June issue looks at drilling and production from an international point of view, with reports from a variety of regions outside the U.S.

Drilling and Exploration

Shakeout Predicted For Service Industry

TABLE 1. U.S. drilling activity during the first half of this decade

Year	Estimated wellhead revenues, billions	Estimated plowback, %	Estimated drilling expenditures, billions	Estimated footage drilled, millions	Rigs working	Estimated cost/ft drilled
1981	$110	34.2	$37.6	400	3,970	$94
1982	115	23.7	27.3	355	3,106	77
1983	112	17.2	19.3	280	2,232	69
1984	115	18.8	21.6	304	2,428	71
1985	110	16.3	17.9	265	2,120E	67.50

Source: American Petroleum Institute and E.F. Hutton estimates.

The level of worldwide drilling activity, and U.S. drilling in particular, is headed for a more severe decline than has generally been predicted, according to a recent analysis by Kevin M. Conboy of E.F. Hutton & Co. Inc. of New York.

As a result, Conboy looks for the petroleum service industry to be "headed toward the shakeout that is required to reduce industry capacity and weed out the weaker market participants."

The duration of intensive price competition and depressed levels of drilling activity, the E.F. Hutton analyst said, will largely be determined by the psychology of the oil industry regarding oil prices. "We believe," he said, "that the petroleum industry is now just beginning to recognize that market forces, not OPEC, will dictate the level of oil prices. In essence, oil companies, reluctantly, are beginning to perceive that OPEC is not an effective cartel. This change in attitude is bound to eventually create a reevaluation of long-term corporate strategies regarding the deployment of oil industry cash flows and drilling expenditures."

Long-term strategies developed by major oil companies during 1982 and 1983, Conboy said, were based on an oil price of at least $29/bbl. This resulted in, "acquisition of domestic reserves via the stock market which, in some cases, resulted in major increases in long-term debt; acquisition of substantial deepwater acreage in the Gulf of Mexico; a return to exploration in the North Sea; onshore acreage acquisition in deep gas basins, such as the Anadarko; a willingness to pursue expensive frontier exploration in Alaska and other frontier areas offshore; and, in some cases, substantial repurchases of company common shares."

Now, however, there is a growing risk that oil prices may not stay above the $25/bbl level during the next 2 years. And that, Conboy pointed out, raises serious questions regarding previous scenarios for oil prices.

Questioning of past assumptions regarding future oil prices on the part of major oil companies could result in much lower drilling budgets than previously planned for 1985 and 1986, Conboy said. And he went on to predict that drilling activity in the U.S. this year could decline to 2,120 rigs working, 265 million ft of hole drilled, and drilling expenditures of $17.9 billion. His forecast is based on:

- A more cautious attitude toward exploration by the major oil companies due to increased recognition that oil prices could drop below $25/bbl during 1985-86. The same is even more valid for independent oil company spending.
- Continued weak market conditions for domestic natural gas, both in terms of price and demand, which should continue to discourage gas drilling.
- Lower producer cash flows due to declines in average oil and gas prices in 1985.
- A reduction in outside funding for oil and gas as banks and individual investors become increasingly apprehensive regarding future oil prices. In addition, tax-shelter-related monies may also be hard to come by due to concerns regarding the prospect of a flat tax.

A prominent assumption in E.F. Hutton's 1985 earnings estimates for oil service companies is that price discounting will intensify as drilling activity declines. And the odds, Conboy said, favor a 1985 seasonal low point for active U.S. rigs to be in the 1,750 to 1,800 range, "somewhat below the low point reached in the spring of 1983 after OPEC cut oil prices by $5/bbl." (At this writing, in late March, the U.S. rig count is only slightly higher than 1,900.)

E.F. Hutton looks for the rate of recovery in domestic drilling activity to be slow and gradual "due to the likelihood that uncertainty regarding future oil prices will persist. Moreover, we are not very optimistic that drilling activity in the latter part of 1985 will experience its seasonal surge that usually is prompted by year-end tax planning considerations."

A 13% decline in average rigs working in the U.S. is likely to result in a further widening of price discounts for oil services and products in 1985. In E.F. Hutton's view, as drilling activity declines and remains depressed, the low cost factors in various oil service markets may increase price discounting in order to gain a greater share of a declining market. "This is particularly the case in such high-fixed-cost segments (of the market) as well logging and pumping services.

"Certainly in the case of well logging, which we attach the greatest odds to a widening in price discounting, a significant decline in demand for wireline services could lead to more aggressive price concessions.

"In the case of pumping services, a further decline in drilling activity and persistence of depressed levels of activity may result in a further widening in discounts. Already, there are indications that U.S. pumping service discounts have increased, resulting in margin pressures."

Essentially, what the E.F. Hutton report says is that, the longer drilling activity remains depressed, the greater the likelihood of increased oil service price discounting. In addition, discounts can be expected to become increasingly more aggressive as the decline in activity gets steeper.

Regarding 1986, the report is not any more hopeful about oil prices, "although the time and magnitude of future declines remain uncertain. The following events," the report said, "will certainly pose challenges to OPEC:

- The end of the UK coal workers strike, which reduces demand for OPEC oil.
- Increased Iraqi production and exports as pipeline export capacity comes on stream outside of the Persian Gulf.
- Continued growth in OPEC export refining capacity, putting a further downward pressure on European and U.S. downstream margins.
- A significant decline in the value of the dollar, thereby eroding OPEC's purchasing power and creating incentives for increased oil exports.
- The seasonal uptick in oil demand in the fourth quarter of 1985, which could create instability as individual OPEC members strive for market share.
- Seasonal declines in oil demand in the spring and summer of 1986.
- And the next economic recession.